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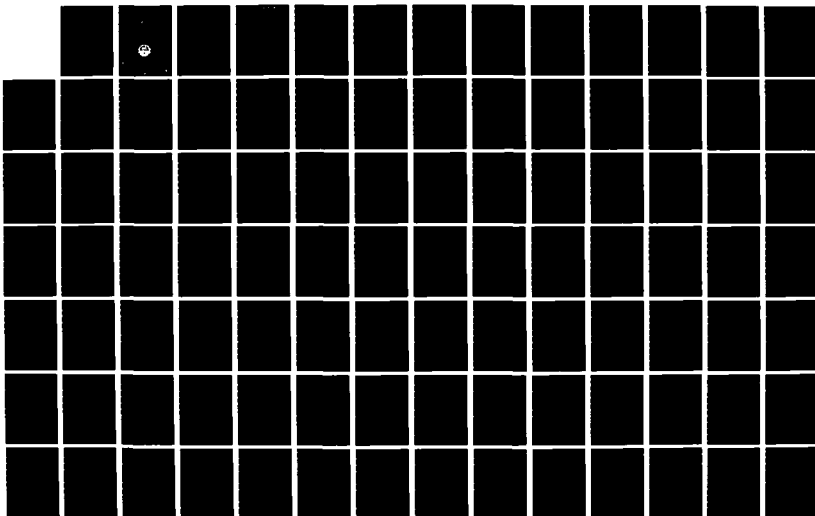
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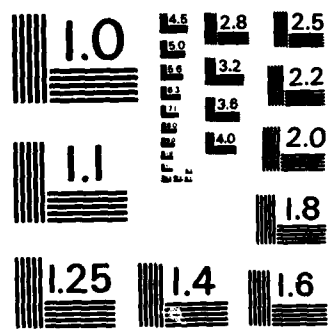
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DEPARTMENT OF DEFENSE  
SURVEY OF LIVING CONDITIONS OVERSEAS

1984

VOL 2: RESULTS

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San Diego, California 92152



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**DEPARTMENT OF DEFENSE  
SURVEY OF LIVING CONDITIONS OVERSEAS**

**1984**

**VOL. 2: RESULTS**

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## FOREWORD

This survey of service personnel with dependents stationed overseas was conducted in cooperation with the housing offices for the Army, Navy, Air Force, and Marine Corps under the auspices of, and funded by, the Defense Housing Management Systems Office (DHMSO), Office of the Deputy Assistant Secretary of Defense (Installations). The results are directed primarily to those involved in setting and implementing policies, procedures, and instructions affecting the living conditions of service personnel and their families outside the continental United States. Results are reported on responses from service members stationed in the United Kingdom, Germany, Italy, Japan/Okinawa, and Korea.

This report is the second of a series of three reports on the Department of Defense (DoD) Survey of Living Conditions Overseas 1984. It presents and discusses the survey results by Service within each country and includes a general discussion of the living conditions in the countries surveyed. The other two reports in this series are NPRDC TR 85-27 (Vol. 1: Management Report), which highlights the survey results aggregated across Services and countries and NPRDC TR 85-29 (Vol. 3: Responses), which presents all the survey responses by Service, country, and DoD totals for accompanied and unaccompanied respondents.

Appreciation is extended to the following persons for their assistance with the survey:

- Mr. Stephen B. Joyce, Mr. John Perrygo, and Ms. Gloria Howard, DHMSO.
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- Ms. Judy Paulson, Navy Housing Office, Washington, DC.
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## SUMMARY

### Problem

Approximately 267,000 U.S. military personnel with dependents are permanently stationed overseas at any given time. Housing and other aspects of living overseas with their families are important to the mission of the military Services because of their impacts on job performance and military career intentions. Policy makers and managers of military housing need to know the service personnel's experiences and opinions about family housing, support services, and facilities so that they can make informed decisions. To promote this, differences among foreign countries in terms of housing, conditions, experiences, preferences, attitudes, opinions, and special situations that exist need to be documented.

### Purpose

The purpose of this survey was to obtain information concerning the experiences and opinions of military personnel about their living and working conditions overseas. Specifically, the survey was concerned with determining:

1. Problems. The most serious and frequent problems encountered overseas by service members with families.
2. Impact of housing and living conditions. The perceived effect of housing and living conditions on job performance, military career intentions, and willingness to choose the present assignment again.
3. Needs. The most important housing and support facility needs of service members and their families overseas.
4. Importance of housing. The relative importance of housing overseas and other support facilities.
5. Opinions on policy proposals. The opinions of service members toward housing assignment, construction, and allowance policy proposals.

### Approach

A survey questionnaire was developed with inputs based on visits to the target countries, interviews with housing office managers and service personnel, and consultation with the Defense Housing Management Systems Office (DHMSO), representatives from the four Services, and other Department of Defense (DoD) personnel. The questionnaire was mailed to a random sample of 32,806 service members, stratified by pay grade and Service during March and April 1984. All personnel were currently living in the United Kingdom, Germany, Italy, Japan/Okinawa, or Korea and were eligible for base allowance for quarters (BAQ) at the with-dependents rate. The 17,364 cases analyzed represented an overall adjusted return rate of 59.0 percent. Low return rates from lower grade enlisted personnel in all Services and countries, Air Force personnel in Italy, and Army personnel in Korea make generalizations for these populations less valid than for the others.

## Major Findings and Discussion

1. Permanent housing was the most frequently reported problem among the three most serious problems selected (from a list of 21). This finding was obtained in all five countries. Initial housing costs, spouse employment, language and cultural differences, medical/dental care, and working conditions were other frequently reported serious problems. In Italy, Navy respondents also frequently reported security and local telephone service as serious problems.

2. Permanent housing was most frequently selected as one of the four most important areas needing improvement (from a list of 14 likely areas) in all five countries. Temporary lodgings, medical facilities, and commissaries were also frequently selected as areas needing improvement.

3. The type of housing (government-owned, government-leased, economy) that service members occupied varied widely by country and Service. For example, the majority of respondents in all Services in Japan (71%) lived in government-owned housing. Navy respondents in Italy (78%) and Air Force respondents in all countries (except Japan) lived primarily in economy housing.

4. Permanent housing preference also varied by country and Service. Overall, government-owned housing was preferred more (57%) than the other types, especially in the Asian countries (78%). Economy housing was most preferred in Germany (41%) and Italy (53%). Government-leased housing was the least preferred, possibly because its location was inconvenient to the duty station and support facilities.

5. Government-owned temporary lodgings were preferred to government-leased and economy temporary lodgings, which often lacked features needed by families (e.g., cooking and eating facilities). Approximately one-third of the respondents believed that their experiences in temporary lodgings led them to select permanent housing that was less than satisfactory. This may have been caused by their wish to leave the temporary quarters as soon as possible.

6. Sixty percent of the service members were satisfied with the overall comfort and adequacy of their permanent residences. Respondents in Japan, where over 70 percent lived in government-owned housing, were the most satisfied; respondents in Korea, where 72 percent lived in government-leased or economy housing, were the least satisfied.

7. In general, residents of government-owned housing were more satisfied than those in economy housing with many aspects of their residences (e.g., size, operating systems, and convenience). Especially in Japan and Korea, residents of government-owned housing were much more satisfied than those in economy housing. In Germany, residents of economy housing were more satisfied than those in government-owned and government-leased housing, possibly because they were so dissatisfied with lack of privacy in and size of government-owned (stairwell) and government-leased apartments.

8. All respondents expressed the most dissatisfaction with the heating system (46%) and convenience of their residence to major medical facilities (47%). Respondents with children were most dissatisfied (44 to 56%) with recreational facilities for preteen and teenage children.

9. In most of the countries, moderate to high levels of dissatisfaction were found with the economy housing listings provided by the housing offices, especially with the number of listings available (67%), up-to-date information about the listings (50%), and the size of the rental units available (50%). A relatively high percentage of service members, particularly in Korea, also reported that certain housing office services were either not provided (especially transportation to inspect economy listings) or not used (especially language interpretation and assistance with utility companies).

10. Respondents favored (61 to 64%) extending eligibility to and constructing government family housing for currently ineligible service families. They also generally favored basing assignment to family housing solely on bedroom requirements while retaining designated officer and enlisted housing. Assignment and construction proposals that included the possibility for longer waiting lists and construction delays, as well as the proposal to retain current assignment procedures, were less popular (32 to 39% in favor). Utility and maintenance allowances proposals, as well as one suggesting that the service members keep some of their BAQ in exchange for living in a unit with fewer bedrooms than entitled to, were generally favored (51 to 65%).

11. Fifty-seven percent of respondents perceived that their living conditions affected their job performance. About 41 percent said living conditions affected their military career intentions. Over 50 percent of those who perceived an effect on job performance considered it to be negative. Those who were dissatisfied with their permanent residences were more likely to perceive negative effects than those who were satisfied.

12. Unaccompanied service members reported problems with separation from their families and barracks living. Those living with nonsponsored dependents expressed dissatisfaction with living in economy housing and reported spouse and dependent transportation problems. Both groups reported that living conditions affected their job performance and military career intentions negatively more often than did respondents with sponsored dependents.

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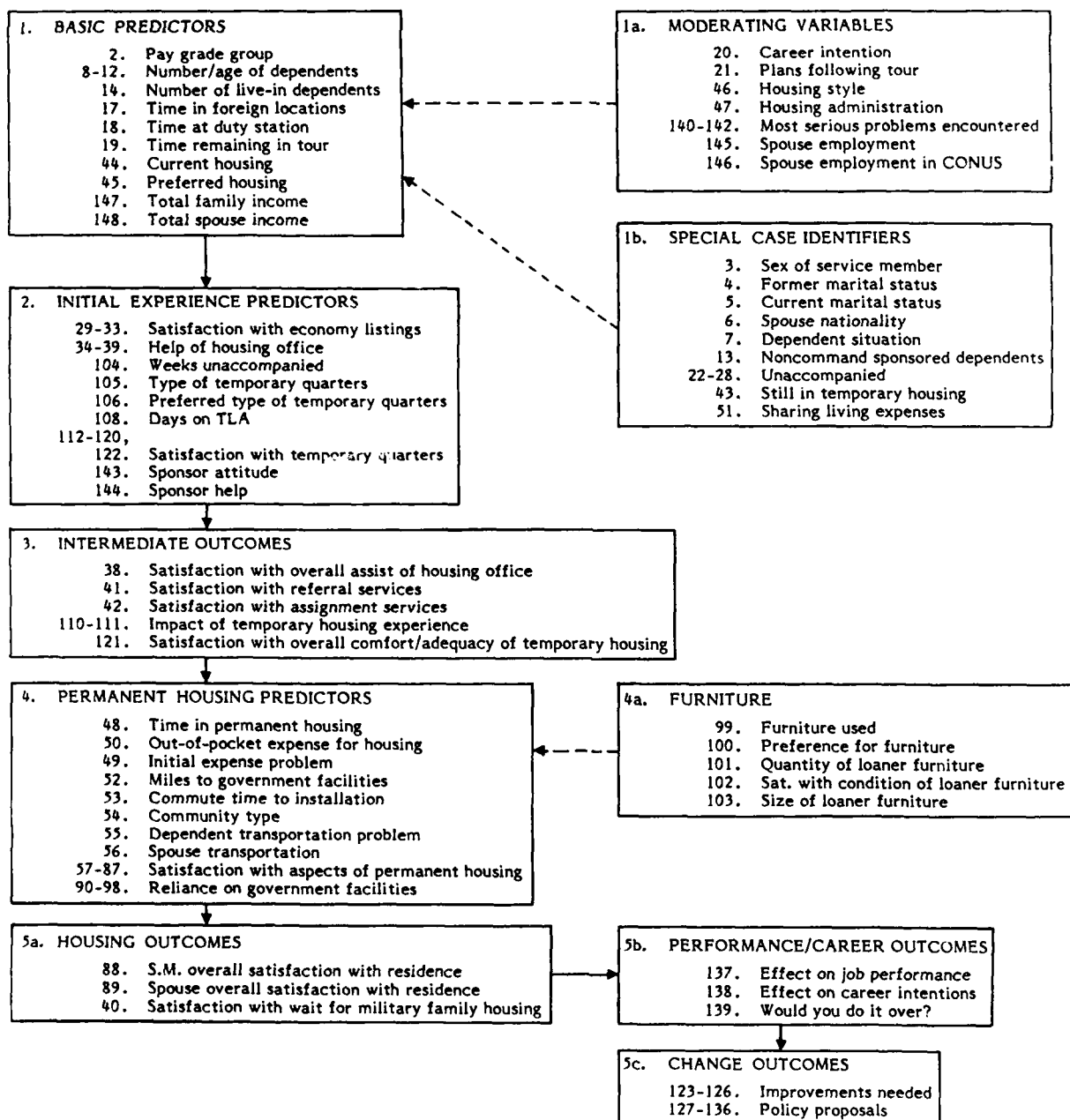


Figure 1. Study model.

## PURPOSE

The purpose of this survey was to obtain information concerning the experiences and opinions of military personnel about their living and working conditions overseas.<sup>2</sup> Specifically, the survey was concerned with determining:

1. Problems. The most serious and frequent problems encountered overseas by service members with families.
2. Impact of housing and living conditions. The perceived effect of housing and living conditions on job performance, military career intentions, and willingness to choose the present assignment again.
3. Needs. The most important housing and support facility needs of service members and their families overseas.
4. Importance of housing. The relative importance of housing overseas and other support facilities.
5. Opinions on policy proposals. The opinions of service members toward housing assignment, construction, and allowance policy proposals.

## APPROACH

### Study Model

The conceptual model used to design the survey questionnaire related major respondent characteristics and moderating variables to events and situations common to an overseas tour. The variables associated with these situations and events were then tied to general attitude outcomes, such as satisfaction with housing, policy preferences, and perceived effects on career intention and job performance.

The model, shown in Figure 1, was based on the hypothesis that major clusters of service personnel, categorized by the basic predictors (box 1), are likely to encounter different experiences during their foreign tour or to possess differing resources for coping with these experiences and required adjustments (e.g., lower pay grade families may have severe constraints on their flexibility in finding suitable housing due to budget limitations). Furthermore, the experiences encountered by these basic clusters of service personnel (and their perceptions of these experiences) may be considerably modified by factors such as whether or not the spouse is employed (box 1a) or by the temporary housing situation (box 2). A further set of factors affecting the nature and impact of the experience is the presence of characteristics that make the service member a special case (box 1b) (e.g., having a local national spouse or dependents who are not command sponsored).

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<sup>2</sup>In this report, "overseas" excludes the 50 United States, District of Columbia, and U.S. territories and possessions.

Research has shown that family variables and service members' satisfaction with the "quality of life" in military service has a bearing on retention, morale, and military effectiveness (Farkas & Durning, 1982; Szoc, 1982). Farkas and Durning found that obtaining adequate family housing was regarded as one of four serious problems by more than 20 percent of a CONUS sample of enlisted and officer Navy service members with dependents. The 1975 DoD family housing preference survey in CONUS (Stumpf & Kieckhafer, 1975) showed that, for some personnel, dissatisfaction with housing adversely affected their desire to make the military a career. In Szoc's 1982 study of Navy personnel, two important characteristics of both enlisted and officer personnel with negative attitudes toward remaining in the military were dissatisfaction with (1) the way their families are treated and (2) housing. Primary relocation problems of the enlisted were (1) relocating to higher cost-of-living areas, (2) finding permanent housing, and (3) finding spouse employment. Based on interviews with service members and their spouses with experience living in foreign countries, the overseas experience presents the service member and family with both unique opportunities and a compounded set of problems that are not faced by military personnel in CONUS.

American military personnel and their dependents must make numerous adjustments to living in foreign countries. Suitable and adequate housing and support facilities are of primary importance in this adjustment process (Nice & Beck, 1978). Some of the situations encountered by families overseas include substandard housing, poor heating/plumbing, inadequate wiring for appliances, high rents, high utility deposits, isolation from government support facilities and services, and dispersion from other Americans. Additionally, living in a foreign country can be both frightening and intimidating because of the language, culture, and customs of the country.

In CONUS, if military personnel are not satisfied with the DoD support facilities, they have options in the civilian sector. These options frequently are not available in foreign locations because the facilities are nonexistent, too expensive, or substandard; and service members and families must rely more on DoD support facilities. This places a greater burden on the government facilities (e.g., recreation, medical/dental, child care, commissaries, exchanges). Many of these facilities are of World War II and earlier vintage and are reported to be inadequate, overcrowded, and overused (Government Printing Office, 1983).

Military personnel assigned overseas also face unique problems concerning their housing. There are not enough military family housing units to house all families. A sizeable number of families live in the economy and, in many cases, compete with unaccompanied personnel for limited economy housing. Many of the units are old and the style and quality differ drastically from what the service members and families had in the economy in CONUS. In rural or remote locations, economy housing is widely scattered over the countryside surrounding the U.S. installations, creating transportation problems. Much of the government housing in foreign countries dates back to World War II. Land for development is extremely limited or very expensive in many of the foreign areas where the U.S. military are stationed. Private entrepreneurs are reluctant to build units to lease to the American military without long-term occupancy guarantees or assurances that their units will be marketable in the event of a withdrawal of American troops.

## INTRODUCTION

### BACKGROUND AND PROBLEM

Approximately 24 percent of our military personnel are stationed in foreign countries; that is, 34 percent of the Army, 16 percent of the Navy (ashore and afloat), 21 percent of the Air Force, and 15 percent of the Marine Corps. Overall, approximately 505,000 military personnel (including about 267,000 members with dependents, accompanied and unaccompanied) are serving tours of duty in foreign locations at any given time (Military manpower statistics, 1984; Worldwide manpower distribution, 1984). About 104,000 government-owned and government-controlled family housing assets are available for the families of these service members. Five countries account for approximately 75 percent of the manpower assigned and 85 percent of the family housing assets in foreign locations. West Germany (including Berlin) has about 50 percent of the U.S. military personnel in foreign locations; Japan/Okinawa, about 9 percent; and South Korea, the United Kingdom, and Italy collectively about 16 percent. But in most of these locations, the number of housing assets lags well behind the number of service personnel stationed there.

Most service personnel prefer to serve their foreign tours of duty accompanied by their dependents (Lawson, Somer, Feher, Mitchell, & Coultas, 1983). The Department of Defense (DoD) recognizes that a lower turnover rate associated with longer, accompanied tours benefits the military mission by providing greater continuity and stability in the work force.

In areas where there is a shortage of economy (civilian) housing, noncommand sponsored families and unaccompanied personnel compete with sponsored families in an already overcrowded housing market. Although not automatically entitled to use support facilities and services due to their unsanctioned status, the impact of noncommand sponsored families is felt on medical facilities and the DoD dependent schools, in particular.

The intensified demand for family housing in recent years is partly a result of the change from conscription to an all-volunteer force. The all-volunteer system has resulted in an increase in married service members, female service members, and single parents in the military. In general, the career force is overwhelmingly married. Nearly one fourth of the enlisted service members not eligible for military housing (E-4 or below with less than 2 years of service) are also now married.<sup>1</sup> This new composition of the Armed Services has both changed the demand for housing and increased the impact on support facilities, especially in areas of Europe and Asia. Several recent reports on living and working conditions for military personnel stationed in foreign countries have pointed out the need for more and better family housing and support facilities (Government Printing Office, 1983; Military spouse and family issues, Europe, 1982; Orthner, 1980). As in Continental U.S. (CONUS), the service members must rely on the local economy to house their families when government housing is not available.

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<sup>1</sup>On 7 December 1984, the term "ineligible" was discontinued and replaced with E-3s and below. Also, all E-4s were given the same assignment priority to housing. Because these data were collected and analyzed before this change, this report does not reflect the change.

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The foreign tour was conceptualized as having at least two stages: (1) initial (box 2) and (2) stabilized (box 4) with various outcomes associated with each stage. Intermediate outcomes (box 3) result from the initial experiences of arrival, housing search, temporary lodging, and various kinds of assistance received (box 2). Ultimate outcomes may be separated into those that directly relate to: (1) satisfaction with housing, facilities, and service support received (box 5a); (2) perception of influence on job performance and career intention (box 5b); and (3) judgments of improvements needed and housing policy changes (box 5c).

The overall thrust of the model was that the characteristics of service personnel and their dependents will result in initial attitude outcomes that can be differentiated from an interaction with the particular housing and support situation they encounter at their foreign duty station. These attitudes may or may not be modified through the tour as individuals/families settle into permanent housing and establish stable adjustments to the culture and living conditions in that country. Through the improvements-needed item and opinions expressed regarding housing policies (box 5c), the respondents indicated the kinds of interventions most beneficial in terms of improving their living conditions during foreign tours.

#### Questionnaire Development

The survey instrument was developed in the following four stages between October 1982 and November 1983.

1. Initial. The Navy Personnel Research and Development Center (NAVPERS-RANDCEN) identified content areas important to the study based on literature reviews, examination of past studies, and interviews with service members (who had formerly been assigned overseas) and their spouses. A broad, general study model and a rough draft questionnaire were developed from interview data and previous questionnaires administered to service members regarding their housing, other quality of life issues, and adjustment to foreign cultures.

2. Coordination. The NAVPERSRANDCEN effort was coordinated with a variety of interested organizations, both DoD and non-DoD. Representatives from the headquarters housing office for each Service, the Defense Housing Management Systems Office (DHMSO), and the NAVPERSRANDCEN held round table discussions concerning survey development. In these meetings, representatives agreed on general methods to be used, the general scope, and the proposed content of the survey and provided ideas and suggestions. Also, decisions were made as to the countries to be included in the survey and the sites to be visited to pretest the questionnaire. The service housing representatives cooperated in coordinating interviews and questionnaire pretests. Additionally, numerous other organizations were briefed on the purpose, scope, and time frame of the study. Among others, those contributing to the study were the Defense Manpower Data Center, the Army Research Institute, the Office of Naval Research, the Center for Naval Analysis, and the National Military Wives Association. From these meetings and discussions, the study became more focused and a pilot questionnaire was prepared for testing at selected sites.

3. Pretests. During May 1983, the pilot questionnaire was tested in Korea and Japan (including Okinawa). Specifically, these sites were Osan Air Base and Yongsan Garrison in Korea and Iwakuni, Yokosuka, Misawa Air Base, and Kadena Air Base in Japan. Utilizing the information obtained on-site in the Far East, the pilot instrument was modified for the second test in Europe during August 1983. The European pretest sites

were London and Bentwaters in England, Kaiserslautern and Wildflecken in Germany, and Naples and Vicenza in Italy. The pretest sites represented large and small installations, urban and rural areas, and all four Services. In all pretests, emphasis was placed on testing the questionnaire for content, general wording, understandability, and the use of generic terminology familiar to personnel in all Services. Data and information collection at all of the pretest sites was uniform.

Prior to the survey team's visits, boxes of pretest questionnaires were sent to the housing managers at the selected sites. Questionnaires were to be filled out by service members representing 14 pay grades, accompanied and unaccompanied, and living in both military and economy housing. A sample from each group who filled out and returned the pilot questionnaires to the housing managers was asked to participate in group discussions at the time of the survey team's visits. Enlisted and officer group discussions were conducted separately. These methods were employed primarily to ensure the clarity and relevance of the questionnaire items. Although the desired numbers of pretest and discussion group subjects were not available at all sites, all groups were represented (e.g., pay grade, single parents, dual career).

In-depth interviews with service members and spouses who had not filled out the questionnaire were conducted to confirm the completeness of the questionnaire in terms of scope and content. In order to obtain a better "feel" for the data being collected, the housing staff at each site provided the survey teams with "windshield" tours of the military and economy housing and support facilities.

4. Final questionnaire. The study model and survey instrument were refined utilizing the information gained on-site. Items that did not "work" or appeared to have caused confusion were eliminated or modified. Redundant and superfluous items were deleted. The questionnaire was scaled down from 250 items to 148. Instructions to respondents were retested at each stage of the modification process through minipretests conducted by NAVPERSRANDCEN using military personnel in the San Diego area. Individuals who participated in the pretest reported completing the survey in from 20 to 40 minutes using the separate answer sheet.

#### Questionnaire Description

Copies of the survey materials (cover letter, questionnaire, and answer sheet) are provided in the Appendix A. The 10 areas covered in the final questionnaire are discussed below.

1. Background. This section was included to obtain information on the personal, family, and service-related characteristics of the respondents that may affect the nature and type of their experiences overseas.

2. Unaccompanied. This section was to be completed only by personnel geographically separated from their dependents. The purpose of this set of items was to determine the most common reason for and the perceived effects of the unaccompanied status.

3. Finding permanent housing. This section covered the respondents' experiences seeking housing in the economy and reflected the dependence of military families on housing offices in foreign locations.

4. Location and cost of permanent housing. Items in this section were to be used for classification (e.g., housing type/locations) and as predictors of housing satisfaction (e.g., normal commuting time to duty station).

5. Satisfaction with permanent housing, facilities, and services. The majority of items in this section addressed respondents' satisfaction with aspects of housing and closely related services and facilities. Additional items addressed reliance on government facilities and the use of government furniture.

6. Temporary lodging facilities. Among others, the items in this section addressed satisfaction with the temporary lodgings and the impact of the temporary lodging experience on permanent housing choice and attitude toward living in a foreign country.

7. Improvements needed. In this section, service members were asked to express their opinions on the kinds of facilities they believe need to be constructed, expanded, leased, or renovated at their post, base, or duty station to improve their living and working conditions. The areas of potential improvement focused on housing and support facilities.

8. Policy proposals. In this section, respondents were asked if they favored or opposed the retention or adoption of 10 policy proposals. These proposals focused on assignment procedures for government family housing, occupant responsibilities, and allowances.

9. General topics. Several topics were combined in this section. Three items were general attitude measures that related the foreign living experience to career intention and perception of job performance. Additional items explored the problems encountered by personnel living in foreign areas.

10. Write-in comments. This section was included to capture opinions and attitudes not covered in the questionnaire.

### Sampling Strategy

The study plan called for the data to be analyzed by country, by Service, and by pay grade group within each Service. The goal was to minimize the sampling error for percentages in each Service pay grade group cell (within  $\pm 5\%$  at the 95% level of confidence). Toward this goal, Cochran's (1963) formula for sample size based on known population size was used to determine the cell numbers. A 50 percent return rate was anticipated. Additionally, 10 percent of the respondents were expected not to be reached due to errors in the personnel tapes, lags in questionnaire distribution, and permanent change of station (PCS) moves. Based on these factors, the cell sample sizes were doubled and an additional 10 percent was added.

Service members were eligible for inclusion if they had one or more dependents and were currently living in or homeported in Korea, Japan, the United Kingdom, Germany, or Italy. To the extent this information was available, those due to leave the military on or before 15 April 1984 were not included in the selection pool. Between January and March 1984, each of the Services provided NAVPERSRANDCEN with population figures by pay grade, within the parameters named above, based on their most recent master tapes and address files. From these, NAVPERSRANDCEN calculated the pay grade group sample sizes needed, with individual pay grade numbers proportional to the population. Sampling then was based solely on pay grade.

To the extent that the data were available to them, each Service was asked to draw a random sample of the approximate size within pay grade calculated by NAVPERS-RANDCEN and provide NAVPERSRANDCEN with a tape containing service member's name, APO/FPO address, rate, rank, SSN, race/ethnic code, projected rotation date, educational level, and summary statistics for the individuals and groups. This was done by all Services except the Navy. Due to programming difficulties, the Navy enlisted population selection tape did not include projected rotation date, race/ethnic code, and education level. NAVPERSRANDCEN printed the address labels and rosters.

The Army sample tape and summary statistics were provided by the U.S. Army Soldier Support Center; the Air Force sample tape and summary statistics were provided by the Air Force Human Resources Laboratory; and the Marine Corps sample tape and summary statistics were provided by their finance center. The Navy Military Personnel Command provided Navy population and address tapes to NAVPERSRANDCEN who drew the random samples and summary statistics from the tapes.

Table 1 shows the total number of personnel selected by Service, pay grade group, and country. The size of the Service contingent in each of the five countries determined whether or not that Service would be surveyed in that country. As a result, while the Air Force was surveyed in all five countries, the Marine Corps was surveyed only in Japan/Okinawa. The Army sample was drawn from the populations as of 31 January 1984. The Navy officer sample was based on the in-country populations as of 23 February 1984 and the enlisted sample was based on the in-country populations as of 5 March 1984. The Air Force sample was based on the addressable, in-country populations as of 10 January 1984. The Marine Corps sample was based on the in-country population as of 28 February 1984.

#### Data Collection

Survey materials (cover letter, questionnaire and answer form, and postage-paid return envelope) were mailed to service members at their command addresses during the period between 16 and 30 March 1984. The scheduled cutoff time for return of the answer sheets was extended from 8 to 12 weeks because of three significant incidents that occurred in the administration of the survey. Although these incidents, which are discussed below, may have negatively affected the response rate, there is no way to measure their impact accurately.

The questionnaires were originally scheduled to be mailed in early March. Production and delivery of the printed questionnaires and answer sheets were delayed 32 days due to a change in ownership of the printing plant. This in turn delayed the mailing until the dates shown above.

Soon after the completed answer sheets began to be returned by the respondents, NAVPERSRANDCEN and DHMSO began receiving letters and notes indicating that some respondents felt they had missed the deadline for returning the answer forms. The cover letter, dated 16 March 1984 (Appendix A), requested that the answer form be completed and returned "within five days" instead of "within five days of receipt."

Three weeks after the end of the mailing, large bundles of undelivered questionnaires began to be returned marked "insufficient address." An analysis of the returns revealed four distinct sites where the postal locator service elected not to deliver the mail citing DoD Regulation 5425.6M, Volume II, Postal Manual, Chapter 5, Section D. These sites were Aviano, Italy and Sembach, Ramstein, and Bitburg in Germany. All four sites

Table 1  
Sample Surveyed by Service, Pay Grade, and Country

Pay Grade Group	United Kingdom	Germany	Italy	Japan/ Okinawa	Korea	Total
<u>Army</u>						
E-1 to E-3	--	890	119 <sup>a</sup>	--	557	1,566
E-4 to E-6	--	869	711	--	985	2,565
E-7 to E-9	--	916	391 <sup>a</sup>	--	827	2,134
W-1 to W-4	--	780	51 <sup>a</sup>	--	516 <sup>a</sup>	1,347
O-1 to O-3	--	844	93 <sup>a</sup>	--	444 <sup>a</sup>	1,381
O-4 to O-6	--	817	133 <sup>a</sup>	--	649 <sup>a</sup>	1,599
Total		5,116	1,498		3,978	10,592
<u>Navy</u>						
E-1 to E-2	161 <sup>a</sup>	--	127 <sup>a</sup>	575 <sup>a</sup>	--	863
E-4 to E-6	660	--	638	803	--	2,101
E-7 to E-9	343 <sup>a</sup>	--	322 <sup>a</sup>	638	--	1,303
W-2 to W-4	29 <sup>a</sup>	--	26 <sup>a</sup>	76 <sup>a</sup>	--	131
O-1 to O-3	118 <sup>a</sup>	--	115 <sup>a</sup>	490 <sup>a</sup>	--	723
O-4 to O-6	180 <sup>a</sup>	--	217 <sup>a</sup>	436 <sup>a</sup>	--	833
Total	1,491		1,445	3,018		5,954
<u>Air Force</u>						
E-1 to E-3	685	750	201 <sup>a</sup>	648	128 <sup>a</sup>	2,412
E-4 to E-6	829	838	627	803	693	3,790
E-7 to E-9	726	759	249 <sup>a</sup>	627	297 <sup>a</sup>	2,658
O-1 to O-3	556	693	85 <sup>a</sup>	519	149 <sup>a</sup>	2,002
O-4 to O-6	506	660	64 <sup>a</sup>	312 <sup>a</sup>	175 <sup>a</sup>	1,717
Total	3,302	3,700	1,226	2,909	1,442	12,579
<u>Marine Corps</u>						
E-1 to E-3	--	--	--	651 <sup>a</sup>	--	651
E-4 to E-6	--	--	--	1,369	--	1,369
E-7 to E-9	--	--	--	639	--	639
W-1 to W-4	--	--	--	157 <sup>a</sup>	--	157
O-1 to O-3	--	--	--	500 <sup>a</sup>	--	500
O-4 to O-6	--	--	--	365 <sup>a</sup>	--	365
Total				3,681		3,681
Total	4,793	8,816	4,169	9,608	5,420	32,806

<sup>a</sup>The population listed on the tapes was surveyed.

involved Air Force personnel. The Air Force Human Resources Laboratory, which had provided the address tapes, was contacted, and the questionnaires were remailed bulk to the service members through an alternative source during the period 16 to 20 April for distribution. The second distributions of the questionnaires apparently were not accomplished quickly since many of the respondents at these sites noted on their returned answer forms that they had just received the questionnaire. Some received theirs as late as the first week of July. In order to leave sufficient time for data entry, analysis, and writing of the report, the final cutoff date for returns that could be processed into the sample was 16 July 1984.

### Obtained Sample

Table 2 shows the final obtained sample that was appropriate to use in data analysis.

Overall, 19,948 questionnaire answer forms were returned: 1,434 were returned for insufficient or incorrect address; 193 were returned blank or unusable, 166 were not processed due to late date of return, and 791 were eliminated before or after keypunching because they were incomplete, critical data were missing, or the respondent did not fit the criteria (e.g., proper Service branch by country, having dependents, etc.).

### Return Rates

A return rate of 50 percent was planned during the selection of the sample. The final overall adjusted return rate (adjusted for those questionnaires not delivered or returned from a location not within the parameters of the study) was 59.0 percent. However, the returns were uneven by pay grade groups as well as by certain countries and Services. The return rates affect the degree of confidence with which the results may be projected to the population. With a return rate of 70 percent or better, the results may be considered highly representative of the population. A 50 percent return rate is the minimum acceptable for a moderate degree of confidence that the results represent the population. Return rates of less than 50 percent are questionable with respect to projection of the results and should be considered only as representative of the sample itself.

Table 3 shows the distribution of the samples by country, Service, and pay grade group in terms of the degree of confidence with which the subsamples may be considered representative of the populations or only of the service personnel who responded. The E-1 to E-3 pay grade group consistently showed the poorest return rates, followed by the E-4 to E-6 pay grade group. The lower return rates for Air Force respondents in Italy and Germany reflect the mail distribution problem discussed earlier.

The confidence levels shown in Table 3 are based on the potential for nonresponse bias. The lower the response rate, the greater is the potential for bias in the data. This does not mean that the bias definitely exists, only that the reader should exercise caution when projecting the sample results to the larger populations, especially in the "low" and "no" confidence columns.

### Data Analysis Methodology

Data were analyzed for each Service within a country and compared between and among the Services. Each section of the questionnaire was analyzed for accompanied respondents. A section in survey results for each country discusses special groups of respondents, such as unaccompanied personnel and service members with foreign born spouses.

Table 2  
Obtained Sample by Service, Pay Grade Group, and Country

Pay Grade Group	United Kingdom	Germany	Italy	Japan/ Okinawa	Korea	Total
<b>Army</b>						
E-1 to E-3	--	163	20	--	92	275
E-4 to E-6	--	407	262	--	362	1,031
E-7 to E-9	--	531	251	--	396	1,178
W-1 to W-4	--	538	32	--	276	846
O-1 to O-3	--	519	47	--	248	814
O-4 to O-6	--	612	98	--	410	1,120
Total		2,770	710		1,784	5,264
<b>Navy</b>						
E-1 to E-2	30	--	31	148	--	209
E-4 to E-6	294	--	293	496	--	1,083
E-7 to E-9	255	--	218	487	--	960
W-2 to W-4	23	--	16	57	--	96
O-1 to O-3	80	--	74	304	--	458
O-4 to O-6	148	--	153	346	--	647
Total	830		785	1,838		3,453
<b>Air Force</b>						
E-1 to E-3	229	242	45	270	40	826
E-4 to E-6	559	443	208	546	364	2,120
E-7 to E-9	554	412	115	511	196	1,788
O-1 to O-3	300	292	22	320	65	999
O-4 to O-6	354	292	28	231	125	1,030
Total	1,996	1,681	418	1,878	790	6,763
<b>Marine Corps</b>						
E-1 to E-3	--	--	--	185	--	185
E-4 to E-6	--	--	--	589	--	589
E-7 to E-9	--	--	--	413	--	413
W-1 to W-4	--	--	--	110	--	110
O-1 to O-3	--	--	--	318	--	318
O-4 to O-6	--	--	--	269	--	269
Total				1,884		1,884
Total	2,826	4,451	1,913	5,600	2,574	17,364

<sup>a</sup>The population listed on the tapes was surveyed.

Table 3

Return Rates by Pay Grade Groups  
Final Sample  
(Based on 17,364 Usable Cases)

Service	Return Rate by Pay Grade Group			
	High Confidence	Moderate Confidence	Low Confidence	No Confidence
Europe				
<u>United Kingdom</u>				
Navy	E-7--E-9 (74%) W-2--W-4 (79%) O-4--O-6 (82%)	O-1--O-3 (68%)	E-4--E-6 (45%)	E-1--E-3 (19%)
Air Force	E-7--E-9 (76%) O-4--O-6 (70%)	E-4--E-6 (67%) O-1--O-3 (54%)	--	E-1--E-3 (33%)
<u>Germany</u>				
Army	O-4--O-6 (75%)	E-7--E-9 (58%) W-1--W-4 (69%) O-1--O-3 (61%)	E-4--E-6 (47%)	E-1--E-3 (18%)
Air Force	--	E-7--E-9 (54%) E-4--E-6 (53%)	O-1--O-3 (42%) O-4--O-6 (44%)	E-1--E-3 (32%)
<u>Italy</u>				
	O-4--O-6 (74%)	E-7--E-9 (64%) W-1--W-4 (63%) O-1--O-3 (51%)	E-4--E-6 (37%)	E-1--E-3 (17%)
Navy	O-4--O-6 (71%)	E-7--E-9 (68%) W-2--W-4 (62%) O-1--O-3 (64%)	E-4--E-6 (46%)	E-1--E-3 (24%)
Air Force	--	--	E-7--E-9 (46%) O-4--O-6 (44%)	E-1--E-3 (22%) E-4--E-6 (33%) O-1--O-3 (26%)
Far East				
<u>Japan</u>				
Navy	E-7--E-9 (76%) W-2--W-4 (75%) O-4--O-6 (79%)	E-4--E-6 (62%) O-1--O-3 (62%)	--	E-1--E-3 (26%)
Air Force	E-7--E-9 (81%) O-4--O-6 (74%)	E-4--E-6 (68%) O-1--O-3 (62%)	E-1--E-3 (42%)	--
Marine Corps	W-1--W-4 (70%) O-4--O-6 (74%)	E-7--E-9 (65%) O-1--O-3 (64%)	E-4--E-6 (43%)	E-1--E-3 (28%)
<u>Korea</u>				
Army		W-1--W-4 (53%) O-1--O-3 (56%) O-4--O-6 (63%)	E-4--E-6 (37%) E-7--E-9 (48%)	E-1--E-3 (17%)
Air Force	O-4--O-6 (71%)	E-4--E-6 (53%) E-7--E-9 (66%)	O-1--O-3 (44%)	E-1--E-3 (31%)



A variety of methods were used to analyze the data. These methods included frequency distributions, cross-tabulations, multiple regression analyses, factor analyses, and analyses of variance. The latter method was not reported as such, but was used to test the statistical relationships between variables like pay grade group, country, type of housing, and household composition on many of the other variables (e.g., overall satisfaction, specific aspects of satisfaction, effects of living conditions).

Statistical tests were employed to evaluate the relationships and differences between and among variables. The terms statistically reliable, statistically related, statistically significant, and significant are used interchangeably throughout the report. They generally refer to a relationship measured by correlation coefficients, F tests, or chi squares, etc. that is statistically significant at the 5 percent level or lower. This means that the probability of having found the result by chance alone is only 5 out of 100. Thus, a statistically significant or reliable relationship gives some assurance that the relationship found in the sample data would be true of the entire population from which the sample data were obtained.

Where appropriate, correlational analyses (denoted as  $R =$  ) were performed to indicate the strengths of relationships found between questions and components.

The following terms denote a correlation of the magnitude indicated:

- |                               |           |
|-------------------------------|-----------|
| 1. No association             | .00-- .20 |
| 2. Slight association         | .21-- .39 |
| 3. Moderate association       | .40-- .59 |
| 4. Strong association         | .60-- .79 |
| 5. Extremely high association | .80--1.00 |

The general summary for all five countries at the end of the report used the country as the analytic unit. Since each Service was not represented in each country, analysis by Service across countries would not be meaningful.

All analysis was performed on an IBM 4341 mainframe computer using the Statistical Package for the Social Sciences (SPSS) data analysis package (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975).

The reader is advised again to take into account the sampling error statistics reported previously when interpreting the data in the results sections of this report.

## RESULTS--UNITED KINGDOM (NAVY, AIR FORCE)

### PROFILE OF SAMPLES

The Navy and Air Force were surveyed in the United Kingdom. The return rates (see Table 2) show that, in general, we can be moderately to highly confident that the data are representative of the populations of these two Services with the exception of the E-1 to E-3 respondents in both Services and the E-4 to E-6 respondents in the Navy.

Throughout the sections that follow, results are primarily reported in percentages. In some cases, the percentage columns may not add to 100 percent due to rounding.

#### Demographic Characteristics

##### Pay Grade

Pay grades were grouped to facilitate analysis, presentation, and interpretation. Table U-1<sup>3</sup> shows the distribution of pay grade groups by Service. In both samples, the majority of the respondents were in the E-4 to E-9 pay grade groups (66.1% for the Navy and 55.7% for the Air Force).

Table U-1

Pay Grade Group by Service (Q1-Q2)

Pay Grade Group	Navy		Air Force		Total	
	n	%	n	%	n	%
E-1 to E-3	30	3.6	229	11.5	259	9.2
E-4 to E-6	294	35.4	559	28.0	853	30.2
E-7 to E-9	255	30.7	553	27.7	808	28.6
W-2 to W-4	23	2.8	--	--	23	0.8
O-1 to O-3	80	9.6	300	15.0	380	13.4
O-4 to O-6	148	17.8	355	17.8	503	17.8
Total	830	99.9	1996	100.0	2826	100.0

In both Services, the E-1 to E-3 group consisted largely of E-3s. In the Navy sample, the E-4 to E-6 group was primarily E-5s and E-6s, while in the Air Force there was a more equal representation across all three pay grades. In both Services, the E-7 to E-9 group consisted mainly of E-7s. Warrant officers, represented only in the Navy sample, were approximately equally W-2s, W-3s, and W-4s (with the total sample extremely small). Commissioned officers in both Services were primarily O-3s in the O-1 to O-3 groups and O-4s and O-5s in the O-4 to O-6 groups.

<sup>3</sup>Prefix of the table numbers identifies survey results by country: U = United Kingdom.

The Navy and Air Force samples in the United Kingdom were very similar in terms of their demographic characteristics, service histories, career intentions, and plans following completion of the current tour.

#### Sex, Marital Status, and Spouse Nationality (Q3-Q6)

Ninety-two percent of the Navy and 96 percent of the Air Force respondents were males.

Since the sample selected included only personnel with dependents, 94.2 percent of the Navy respondents and 95.0 percent of the Air Force respondents were currently married. Approximately 6 to 7 percent of both samples had married since their arrival at the current duty station. In addition, approximately 5 percent of each sample had been divorced, widowed, or separated since arriving at the current duty station. Significant numbers of service members in both Services were married to local nationals (16.9%, Navy and 18.5%, Air Force). Service members with local and other foreign national spouses were most often found in the E-4 to E-9 pay grades.

#### Household Composition and Dependents

Table U-2 shows household composition by Service. The very large majority of households in both Services included children. Single parent households, households that included relatives, and dual career households were uncommon.

Table U-2  
Household Composition (Q7)

Household Composition	Navy (n = 828) %	Air Force (n = 1,991) %
Households without children	16.9	17.7
Households with children	83.1	82.3
Single parent households	4.9	4.0
Households with relatives as dependents	2.2	2.0
Dual career military households	4.0	3.3

Households without children were found most often among the E-1 to E-3 pay grades for the Navy respondents and among the E-1 to E-3 and O-1 to O-3 respondents for the Air Force. Female service member respondents in both samples tended to be members of dual career households and to fall into the E-4 to E-6 pay grade groups. Because of this, single parent and dual career households tended also to be found predominantly among the E-4 to E-6 pay grades. Households that included relatives were found mostly among the E-4 to E-9 pay grades for the Navy respondents, but showed no differences by pay grade group in the Air Force sample.

Household Size (Q14)/Age of Children. The average number of live-in dependents was 2.5 for the accompanied Navy sample and 2.6 for the accompanied Air Force. In both

Services, the E-1s to E-6s and O-1s to O-3s averaged fewer live-in dependents than did the E-7s to E-9s and warrant and commissioned officers. Table U-3 shows, for each dependent age group, the percentage of each Service sample that had one or more dependents in that age group. Since the respondents frequently had children in more than one age group, the percentages will not add to 100 percent.

Table U-3  
Ages of Children (Q8-Q11)

Age Group	Navy (n = 730) %	Air Force (n = 1,740) %
Q8: Children under 2 years of age	20.6	20.6
Q9: Children 2 to 5 years of age	27.8	29.2
Q10: Children 6 to 12 years of age	45.6	45.4
Q11: Children 13 to 18 years of age	27.2	32.8

Table U-4 shows the number of children in each age group.

Table U-4  
Number of Children in Each Age Group

Age Group	Navy		Air Force		Total	
	n	%	n	%	n	%
Children under 2	168	14.3	390	13.2	558	13.5
Children 2 to 5	242	20.6	600	20.2	842	20.3
Children 6 to 12	489	41.6	1142	38.5	1631	39.4
Children 13 to 18	277	23.6	833	28.1	1110	26.8
Total	1176	100.1	2965	100.0	4141	100.0

Children under age six were found in nearly one-half of the households. The most prevalent age group of dependents was between 6 and 12 years of age for both Services, reflecting the preponderance in the sample of enlisted service members in the E-4 to E-9 pay grades.

Command Sponsorship of Dependents (Q13). Command sponsorship of dependents is important in terms of finances and services available to the dependents. For the purposes of analysis, sponsorship is of concern only among the accompanied respondents. The large majority of respondents' dependents were all command sponsored (88% Navy and 89% Air Force). Unsponsored dependents was more prevalent among the enlisted than the officer

respondents in both Services. Comparisons of respondents with and without command sponsorship of live-in dependents are included with special groups (p. 73).

### Spouse Employment

Table U-5 shows the percentage of spouses of accompanied respondents who were employed in CONUS prior to the move overseas and currently employed in the United Kingdom.

For both Services, about 10 percent more of the total number of spouses chose not to look for work overseas than did so in CONUS. However, over 20 percent of the total were looking for work in the United Kingdom, compared to just 3 to 5 percent in CONUS. Between 24 and 28 percent fewer spouses had civilian jobs of any kind in the United Kingdom compared to the same figures for CONUS.

In both Services, spouses of E-1 to E-3 respondents were more often unemployed and looking for work (37.5% Navy and 32.1% Air Force) than were spouses of respondents in all other pay grades (15.6 to 23.4% Navy and 12.5 to 22.0% Air Force). Warrant and commissioned officers' spouses were more likely not to be looking for work (56 to 64% Navy and 51 to 63% Air Force) than spouses of enlisted personnel overall (42 to 48% Navy and 34 to 39% Air Force).

### Family/Spouse Income (Q147-Q148)

Table U-6 shows the median family income for the previous month by pay grade group. The median is the point below which one-half of the reported incomes lie. It is used here in place of the mean (or average) income because it is not influenced by extreme incomes (very low or very high) that probably represent errors in the data. Total family income was generally a reflection of pay grade level for both Services. However, the reader is reminded again that the pay grade group samples did not contain equal representation of all pay grades. The median incomes reported will be affected by this unequal representation.

Table U-7 shows the percentage of spouses who were reported as having no income, as well as the median income by pay grade group of those spouses who did have income during the previous month.

Very large percentages of spouses (66 to 82%) in both Services and in all pay grade groups were reported as having no income for the previous month. Among spouses with income, the average was \$576. Spouses of O-4 to O-6 respondents in the Navy and O-1 to O-3 respondents in the Air Force showed the highest median incomes.

### Special Groups

Six special groups of respondents were identified as potentially different from the majority with respect to their experiences, attitudes, and opinions. Table U-8 shows the representation of these respondents in the sample by Service.

Where they have been found to be different from their opposite group (e.g., single parents versus married parents), the experiences, attitudes, and opinions of service members falling into these special groups are presented together starting on p. 73. Special analyses and responses to items that pertain only to the unaccompanied are also presented with special groups.

Table U-5

Spouse Employment Status--United Kingdom/CONUS (Q145-Q146)

Status	Navy				Air Force				Total			
	United Kingdom n	%	CONUS n	%	United Kingdom n	%	CONUS n	%	United Kingdom n	%	CONUS n	%
<u>Unemployed, not looking for work</u>												
E-1 to E-3	10	41.7	3	18.1	64	34.2	35	35.0	74	35.1	38	32.7
E-4 to E-6	115	46.6	59	33.9	191	39.3	100	24.8	306	41.7	159	27.5
E-7 to E-9	100	47.8	71	44.7	164	34.6	131	32.0	264	38.6	202	35.6
W-2 to W-4	11	61.1	5	35.7	--	--	--	--	11	61.1	5	35.7
O-1 to O-3	43	55.8	24	34.8	140	50.5	88	36.1	183	51.7	112	35.8
O-4 to O-6	87	64.4	55	48.7	191	62.8	119	49.2	278	63.3	174	49.2
Total	366	51.5	217	39.8	750	43.4	473	33.8	1116	45.8	690	35.5
<u>Unemployed, looking for work</u>												
E-1 to E-3	9	37.5	3	18.8	60	32.1	3	3.0	69	32.7	6	5.2
E-4 to E-6	50	20.2	6	3.4	107	22.0	21	5.2	157	21.4	27	4.7
E-7 to E-9	49	23.4	5	3.1	102	21.5	27	6.6	151	22.1	32	5.6
W-2 to W-4	4	22.2	1	7.1	--	--	--	--	4	22.2	1	7.1
O-1 to O-3	12	15.6	0	0.0	50	18.1	14	5.7	62	17.5	14	4.5
O-4 to O-6	24	17.8	0	0.9	38	12.5	5	2.1	62	14.1	5	1.4
Total	148	20.2	15	2.9	357	20.7	70	5.0	505	20.7	85	4.4
<u>Employed full time (civilian)</u>												
E-1 to E-3	9	37.5	5	31.3	28	15.0	39	39.0	28	13.3	44	37.9
E-4 to E-6	50	20.2	62	35.6	74	15.2	160	39.6	96	13.1	222	38.4
E-7 to E-9	49	23.4	49	30.8	97	20.5	167	40.8	119	17.4	216	38.0
W-2 to W-4	4	22.2	6	42.9	--	--	--	--	1	5.6	6	42.9
O-1 to O-3	12	15.6	27	39.1	39	14.1	86	35.2	46	13.0	113	36.1
O-4 to O-6	24	17.8	35	31.0	25	8.2	70	28.9	33	7.5	105	29.7
Total	148	20.8	184	33.8	263	15.2	522	37.3	323	13.2	706	36.3
<u>Employed P/T or intermittently (civilian)</u>												
E-1 to E-3	3	12.5	3	18.8	33	17.6	19	19.0	36	17.1	22	19.0
E-4 to E-6	43	17.4	27	15.5	83	17.1	86	21.3	126	17.2	113	19.6
E-7 to E-9	35	16.7	32	20.1	97	20.5	72	17.6	132	19.3	104	18.3
W-1 to W-4	2	11.1	2	14.3	--	--	--	--	2	11.1	2	14.3
O-1 to O-3	11	14.3	13	18.8	39	14.1	42	17.2	50	14.1	55	17.6
O-4 to O-6	16	11.9	22	19.5	46	15.1	44	18.2	62	14.1	66	18.6
Total	110	15.5	99	18.2	298	17.2	263	18.8	408	16.7	362	18.6
<u>In the military</u>												
E-1 to E-3	2	8.3	2	12.5	2	1.1	4	4.0	4	1.9	6	5.2
E-4 to E-6	17	6.9	20	11.5	31	6.4	37	9.2	48	6.5	57	9.9
E-7 to E-9	3	1.4	2	1.3	14	3.0	12	2.9	17	2.5	14	2.5
W-2 to W-4	0	0.0	0	0.0	--	--	--	--	0	0.0	0	0.0
O-1 to O-3	4	5.2	5	7.2	9	3.2	14	5.7	13	3.7	19	6.1
O-4 to O-6	0	0.0	0	0.0	4	3.1	4	1.7	4	0.9	4	1.1
Total	26	3.7	29	5.1	60	3.5	71	5.1	86	3.5	100	5.1

Table U-18  
Satisfaction with Aspects of Temporary Lodgings

Aspect	Responses (%)							
	Government Owned		Government Leased		Economy		Total	
	Dissat- isfied	Satis- fied	Dissat- isfied	Satis- fied	Dissat- isfied	Satis- fied	Dissat- isfied	Satis- fied
<b>Navy</b>								
Q112: Personal safety/ security	26.0	55.8	33.3	56.7	13.6	62.1	16.4	60.9
Q113: Privacy	26.9	55.1	32.1	50.0	37.8	48.3	35.9	49.4
Q114: Kitchen, eating, and cooking facilities	35.7	50.0	30.4	56.5	38.0	43.8	37.0	46.0
Q115: Laundry facilities	50.8	34.9	38.9	44.4	67.2	21.8	62.3	25.8
Q116: Cleanliness	17.9	66.7	20.0	76.7	20.8	65.8	20.4	66.5
Q117: Play space for children	45.0	41.7	46.2	23.1	57.3	33.2	54.5	34.4
Q118: Size of quarters	59.5	25.3	50.0	40.0	58.0	30.1	57.8	30.0
Q119: Convenience of lodgings to the installation	24.1	64.6	26.7	56.7	25.1	59.3	25.0	59.9
Q120: Convenience of lodgings to government facilities	24.1	60.8	33.3	50.0	41.3	41.6	38.4	44.8
Q121: Overall comfort and adequacy of lodgings	47.4	43.6	30.0	53.3	39.8	36.7	40.6	37.2
Q122: Cost	42.3	38.0	48.3	41.4	39.8	36.7	40.1	45.2
<b>Air Force</b>								
Q112: Personal safety/ security	24.9	53.9	32.1	39.6	25.2	53.5	25.3	53.1
Q113: Privacy	47.9	36.1	47.2	32.1	49.8	35.8	48.8	35.8
Q114: Kitchen, eating, and cooking facilities	48.9	37.7	51.2	34.9	55.6	32.2	51.8	35.3
Q115: Laundry facilities	45.2	42.5	64.4	24.4	63.3	25.7	52.4	35.8
Q116: Cleanliness	28.8	53.3	36.4	41.8	26.4	57.4	28.0	54.8
Q117: Play space for children	51.5	35.6	69.7	21.1	53.8	35.4	53.4	34.9
Q118: Size of quarters	51.3	36.5	48.1	37.0	68.2	20.8	59.1	29.1
Q119: Convenience of lodgings to the installation	14.0	76.4	40.0	49.1	39.6	48.9	27.2	62.3
Q120: Convenience of lodgings to government facilities	15.5	76.4	41.8	43.6	41.9	46.1	29.0	60.7
Q121: Overall comfort and adequacy of lodgings	40.9	44.2	51.9	40.7	51.0	33.3	46.1	39.0
Q122: Cost	17.9	66.5	37.5	41.7	54.1	30.5	36.5	47.9

economy for 79.8 percent and government for 20.2 percent. For the Air Force respondents, the most recent temporary lodgings were 47.3 percent economy and 52.7 percent government.

Features Most Often Reported as Not Available. Certain kinds of typical housing features were reported to be not available in the temporary lodgings. These are shown in Table U-17 by Service and type of lodging.

Table U-17  
Features Most Reported as Not Available (Q114-Q115, Q117)

Feature	Navy (%)			Air Force (%)		
	Gov. Owned	Gov. Leased	Economy	Gov. Owned	Gov. Leased	Economy
Q114: Kitchen, eating, cooking facilities	9.1	20.7	34.9	18.5	15.7	33.7
Q115: Laundry facilities	18.2	35.7	45.2	8.4	16.7	42.3
Q117: Play space for children	7.7	31.6	23.2	15.3	17.5	22.6

Economy temporary lodgings (that are most frequently hotels) most often did not have features typically found in permanent housing. However, government-leased temporary lodgings were also reported to be nearly as deficient as the economy units. Regarding government-owned units, laundry facilities were most often reported as not available by the Navy sample, while kitchen facilities and play space for children were most often reported by the Air Force sample.

Satisfaction Levels. Respondents were asked their satisfaction level with 10 aspects of their temporary housing, as well as with the overall comfort and adequacy of the lodgings. To simplify presentation of the data in Table U-18, the very and somewhat satisfied or dissatisfied categories are combined. Further, the neither dissatisfied nor satisfied responses are not shown, causing the satisfied and dissatisfied percentages not to sum to 100 percent. The data presented are only for those respondents who reported their satisfaction level; that is, for whom the service was available.

1. Navy. In the Navy sample, the only significant difference in satisfaction level as a function of the type of temporary quarters was that those who had occupied economy lodgings were more dissatisfied than were those who had occupied government-owned lodgings with the convenience of those lodgings to the installation. No significant differences were found in the Navy sample as a function of pay-grade groups.

2. Air Force. In the Air Force sample, dissatisfaction was generally greater among those who had occupied economy or government-leased quarters than those in government-owned quarters. In particular, the aspects showing statistically significant differences were with the laundry facilities, size of the quarters, convenience to the installation and government facilities, costs, and satisfaction with the overall comfort and adequacy of the quarters.



Table U-16

## Type of Temporary Lodgings Occupied and Preferred (Q105-Q106)

Pay Grade	Responses (%)				Disparity %
	Government-owned/leased		Economy		
	Occupied %	Preferred %	Occupied %	Preferred %	
<u>Navy</u>	(n = 85)	(n = 280)	(n = 489)	(n = 294)	
E-1 to E-3	40.0	80.0	60.0	20.0	40.0
E-4 to E-6	18.6	50.8	81.4	49.2	32.2
E-7 to E-9	12.7	53.8	87.3	46.2	41.1
W-2 to W-4	7.7	30.8	92.3	69.2	23.1
O-1 to O-3	17.7	48.3	82.3	51.7	30.6
O-4 to O-6	10.2	39.8	89.8	60.2	29.6
Total	15.0	49.1	85.0	50.9	34.1
<u>Air Force</u>	(n = 846)	(n = 1193)	(n = 556)	(n = 211)	
E-1 to E-3	83.2	86.4	16.8	13.6	3.2
E-4 to E-6	60.4	83.3	39.6	16.7	22.9
E-7 to E-9	49.3	89.0	50.7	11.0	39.7
O-1 to O-3	58.0	86.9	42.0	13.1	28.9
O-4 to O-6	64.7	80.8	35.3	19.2	16.1
Total	60.3	85.2	39.6	14.8	24.8

economy. In every case, the disparity indicates that fewer respondents were able to occupy government lodgings than preferred them. The Navy enlisted pay grades showed the greatest disparity between the lodgings occupied and their preferences. Greatest disparity among the Air Force respondents was in the E-7 to E-9 pay grade group.

#### Days in Temporary Lodgings (Q107)/Time Drawing TLA (Q108)

Among those who reported they had lived in temporary lodging facilities, the large majority (82.2% Navy and 85.0% Air Force) had spent 60 days or less. Similarly, the time drawing temporary living allowance (TLA) was 60 days or less, with more respondents reporting 30 days or less than between 31 and 60 days on TLA. This was especially the case among Air Force respondents; that is, Air Force respondents spent less time in temporary facilities than did the Navy respondents. No differences were evident by pay grade in either Service.

#### Opinions About Temporary Lodgings

##### Satisfaction with Aspects of Temporary Lodging

Respondents were asked about their satisfaction with various aspects of their most recent (or current) temporary lodgings. For the Navy respondents, this lodging was

questionnaire items. The reader should be aware that their responses are based on their recall of the experiences.

#### Time Unaccompanied Before Arrival of Dependents

As shown in Table U-15 the majority of respondents in both Services traveled concurrently with their dependents to the present duty station. However, the percentage of the Air Force sample (29.1%) that was unaccompanied for some period of time before their dependents joined them was nearly twice as great as for the Navy sample (14.8%).

Table U-15

Time Unaccompanied Before Arrival of Dependents (Q104)

Weeks Unaccompanied	Navy		Air Force		Total	
	n	%	n	%	n	%
None	486	85.1	986	70.9	1472	75.1
1 to 4 weeks	22	3.8	112	8.1	134	6.8
5 to 8 weeks	25	4.4	150	10.8	175	8.9
9 to 12 weeks	15	2.6	70	5.0	85	4.3
13 weeks or longer	23	4.0	72	5.2	95	1.8
Total	571	99.9	1390	100.0	1961	99.9

In the Navy, somewhat more of the E-1 to E-3 and W-2 to W-4 respondents reported being unaccompanied for a period of time before their dependents arrived (25.0 and 30.8% respectively) compared to the other pay grade groups (10 to 18%). In the Air Force, less than one-half (40.9%) of the E-1 to E-3 respondents and less than two-thirds (61.2%) of the E-4 to E-6 respondents traveled concurrently with their dependents compared to 78 to 81 percent of all other pay grades.

#### Actual and Preferred Types of Temporary Lodgings

Table U-16 shows the percentages of respondents by type of temporary lodging that they occupied upon arrival at the duty station and by their preferred type. The "disparity" column refers to the difference between the percentage who occupied that type of lodging and the percentage who preferred to occupy that type.

Government-owned and government-leased temporary lodgings are combined in Table U-16 due to the small number who occupied government-leased lodgings (i.e., 2.4% Navy and 2.8% Air Force). Preference for government-leased temporary quarters was reported by 8.4 percent of the Navy sample and 4.9 percent of the Air Force sample.

It appears that more government temporary lodgings were available for Air Force personnel than for the Navy respondents because the majority of the Navy sample occupied temporary economy lodgings and the majority of the Air Force sample were housed in government temporary quarters. In both Services, the E-1 to E-3 pay grades more often than any other pay grades occupied government temporary lodgings. With the exception of the Navy officers, most respondents preferred government lodgings over

Table U-14  
Out-of-pocket Expenses for Housing (per month)

Out-of-pocket Expenses	Responses (%)						Overall Total
	E-1 to E-3	E-4 to E-6	E-7 to E-9	W-2 to W-4	O-1 to O-3	O-4 to O-6	
<u>Navy</u>							
None	25.0	47.5	54.2	44.4	50.6	33.6	46.4
\$ 10 - 50	12.5	7.8	8.4	11.1	10.4	6.4	8.2
60 - 100	29.2	12.5	10.7	11.1	9.1	14.3	12.4
110 - 150	4.2	6.2	7.6	5.6	7.8	10.0	7.4
160 - 200	0.0	4.7	4.4	11.1	11.7	8.6	6.1
210 - 250	0.0	1.6	0.9	5.6	1.3	2.9	1.6
260 - 300	0.0	2.3	1.8	5.6	0.0	7.9	3.0
310 - 400	8.3	1.2	1.8	0.0	1.3	2.9	1.9
410 - 600	0.0	2.7	0.9	0.0	3.9	4.3	2.4
610 - 1000	16.7	13.2	8.4	5.6	1.3	8.6	9.6
1010 - 1500	4.2	0.0	0.4	0.0	1.3	0.0	0.4
1500+	0.0	0.4	0.4	0.0	1.3	0.7	0.4
<u>Air Force</u>							
None	32.0	50.0	65.0	--	50.4	56.6	53.4
\$ 10 - 50	10.8	7.9	6.1	--	6.7	3.8	6.8
60 - 100	20.6	11.4	7.6	--	12.3	7.9	10.9
110 - 150	9.8	5.1	4.1	--	6.3	4.4	5.4
160 - 200	6.2	5.5	3.7	--	6.3	6.6	5.4
210 - 250	2.6	1.2	1.8	--	2.1	3.5	2.1
260 - 300	3.1	1.4	1.0	--	2.1	2.2	1.7
310 - 400	1.5	1.6	0.4	--	2.5	2.2	1.5
410 - 600	3.1	1.4	1.0	--	2.1	4.4	2.1
610 - 1000	9.3	14.0	8.0	--	7.4	6.6	9.5
1010 - 1500	0.5	0.2	0.4	--	1.4	0.9	0.6
1500+	0.5	0.4	0.8	--	0.4	0.9	0.8

### Sharing Living Expenses (Q51)/Out-of-pocket Expenses for Housing (Q50)

Very few respondents in either Service reported sharing living expenses with persons other than their dependents (1.9% Navy and 1.8% Air Force).

Table U-14 shows the percentages by pay grade group reporting monthly out-of-pocket expenses for housing (including rent, utilities, and initial costs) beyond BAQ, Rent Plus, or SHA. The reader is cautioned that the percentages reporting excessively high expenses (\$600+) probably represent error in the data due to respondents' incorrect use of the answer form. Alternatively, the respondents may have included their total initial housing costs (i.e., may not have read the question carefully).

#### Navy

With 50.6 percent of the Navy respondents living in economy housing, nearly one-half (46.4%) reported no monthly out-of-pocket expenses for housing. Approximately one-third (34.1%) reported expenses between \$10 and \$200, while nearly one-fifth (19.3%) reported their expenses in excess of \$200 per month. By pay grade group, the E-1 to E-3 and O-4 to O-6 respondents were the least likely to have no out-of-pocket expenses.

#### Air Force

With 47.2 percent of the Air Force respondents living in economy housing, just over one-half (53.4%) reported having no monthly out-of-pocket expenses. An additional 28.5 percent reported expenses between \$10 and \$200, while 18.3 percent reported expenses in excess of \$200 per month. The E-1 to E-3 respondents were the least likely group to have no expenses beyond their allowances.

## **PROCESS OF OBTAINING HOUSING**

### Introduction

The usual process for obtaining housing in overseas locations begins with the first move into temporary lodgings upon arrival at the new duty station. These temporary lodgings may be government quarters on or near the installation, or commercial economy lodgings (hotels), depending on what is available in the area. The length of the stay in temporary quarters may vary considerably, while the service members (and their families, if travel was concurrent) await assignment to government housing or seek rental housing in the local economy. The experiences and attitudes of the respondents with respect to temporary lodgings and to the process of obtaining permanent housing are reported in this section.

The number of Navy E-1 to E-3 and W-2 to W-4 service members who answered the items pertaining to finding housing was very small. Although their responses were sometimes quite different from the other groups, the differences are generally not reported in order to prevent distortion of the data.

### Temporary Housing (Q43)

Only a small number of respondents in the samples (2.9% Navy, 3.4% Air Force) were living in temporary housing at the time of the survey. Most of the respondents in the samples had been in their permanent housing for some time when they answered the

Table U-13

## Housing Styles by Service and Pay Grade Group (Q46)

Housing Style	Responses (%)					Total
	E-1 to E-3	E-4 to E-6	E-7 to E-9	W-2 to W-4	O-1 to O-3	O-4 to O-6
<u>Navy</u>	(n = 22)	(n = 249)	(n = 223)	(n = 18)	(n = 77)	(n = 137)
Single family	18.2	16.1	28.3	61.1	40.3	65.7
Duplex	13.6	30.5	28.7	38.9	27.3	10.2
Town/rowhouse	13.6	30.1	31.8	0.0	28.6	14.6
Apartment (walkup & elevator)	54.5	23.3	11.2	0.0	3.9	9.5
<u>Air Force</u>	(n = 187)	(n = 486)	(n = 479)	--	(n = 278)	(n = 316)
Single family	35.3	22.6	29.2	--	54.0	57.9
Duplex	26.3	37.4	35.1	--	24.5	23.1
Town/rowhouse	21.7	36.4	35.1	--	20.9	18.7
Apartment (walkup & elevator)	16.6	3.5	0.6	--	0.7	0.3
						3.1

In the Air Force sample, preference was highest for government-owned housing, followed by economy housing. As in the Navy, government-leased and "other" types of housing were considerably less popular. Similarly the E-1 to E-3 respondents showed the greatest disparity between their current and preferred housing types. That is, they were the least likely pay grade group to be living in their preferred type of housing in the two major categories--government-owned and economy housing. Unlike the Navy respondents, the Air Force O-4 to O-6 respondents showed a slightly higher preference for economy housing than were currently living there. In general, enlisted personnel preferred government-owned housing more than officers.

The location differences between the two Services in the United Kingdom may in part account for their preference differences. Additionally, the declining preference for government-owned housing in the Navy sample mirrors the preferences found in CONUS (Lawson et al., 1983). The Navy in the United Kingdom (especially around London) may have more economy housing options, just as military members do in CONUS. In contrast, the stronger preference for government-owned housing in the Air Force sample across all pay grade groups is a departure from that found in CONUS and probably reflects the greater shortage of suitable economy housing in their more remote or rural locations.

#### Housing Styles (Q44, Q46)

Table U-13 shows the distribution of housing styles by Service and pay grade group. Location differences between the two Services are also evident when comparing the housing styles. A greater percentage of the Air Force than Navy E-1 to E-3 respondents lived in single family houses and considerably fewer E-1 to E-6 respondents lived in apartments.

In both Services, almost all of the government-owned housing was duplex or town/rowhouse style (97.6% Navy and 86.3% Air Force). Government-leased housing was 23 percent single family units in both Services with the majority of the remaining either duplex or row/townhouse styles. A high percentage (40.8%) of the economy housing was single family style in the Navy sample and over one-half (58.0%) of the Air Force economy housing was single family. Apartment style units were relatively uncommon in both Services and even more so in the Air Force sample. In the Navy sample, only 1.2 percent reported living in apartments with elevators in the building. Apartment style residences with elevators were not found at all in the Air Force sample.

#### Commuting Distances to Installation (Q52)/Community Types (Q54)

Among respondents living off the installation, the average commuting distances from the residences to the installation ranged from 10.7 to 11.7 miles across pay grade groups with the median distance for the Navy sample 8.6 miles and the median for the Air Force sample 10.5 miles. No large differences were evident by pay grade or by housing type (government-leased or economy).

Across Services and pay grades, respondents living in government-leased housing most often reported having for their neighbors mostly or all Americans (45 to 70%) or an equal mix of American and local nationals (15 to 35%). Those who lived in economy houses, however, reported having few or no other Americans nearby (73 to 99%).

Table U-12

## Current and Preferred Housing Type by Service and Pay Grade Group (Q44-Q45)

Service/Pay Grade Group	n	Responses (%)							
		Government-owned		Government-leased		Economy		Other	
		Current	Preferred	Current	Preferred	Current	Preferred	Current	Preferred
<u>Navy</u>									
E-1 to E-3	22	0.0	45.5	0.0	0.0	81.8	40.9	18.2	13.6
E-4 to E-6	249	15.5	43.0	27.9	11.2	38.2	42.2	18.3	3.6
E-7 to E-9	223	15.7	40.8	23.3	10.8	42.2	43.9	18.8	4.5
W-2 to W-4	18	0.0	38.9	22.2	11.1	61.1	50.0	16.7	0.0
O-1 to O-3	77	6.5	24.7	11.7	6.5	53.2	59.7	28.6	9.1
O-4 to O-6	138	2.2	15.2	8.7	7.2	79.0	71.0	10.1	6.5
Total	727	11.2	35.1	20.2	9.5	50.6	50.2	18.0	5.2
<u>Air Force</u>									
E-1 to E-3	187	6.9	57.8	4.8	10.2	87.8	32.1	0.5	0.0
E-4 to E-6	485	29.2	57.7	25.5	10.5	42.9	30.9	2.3	0.8
E-7 to E-9	478	37.7	60.5	29.4	9.3	31.1	29.1	1.8	1.0
O-1 to O-3	277	28.9	41.9	15.9	6.5	53.8	50.9	1.4	0.7
O-4 to O-6	316	41.8	38.3	6.6	4.1	48.1	55.7	3.5	1.9
Total	1743	31.3	52.4	19.4	8.3	47.2	38.2	2.0	1.0

### Time in Permanent Housing

Nearly all of the respondents in both samples were living in permanent housing at the time of the survey (97.1% Navy, 96.6% Air Force). Table U-11 shows the amount of time those respondents had lived in their permanent residences.

Table U-11  
Length of Time in Permanent Housing (Q48)

Time in Permanent Housing	Navy		Air Force		Total	
	n	%	n	%	n	%
1 to 6 months	170	23.4	250	14.3	420	17.0
7 to 12 months	161	22.1	530	30.4	691	27.9
13 to 24 months	232	31.9	551	31.6	783	31.7
25 months or longer	165	22.7	414	23.7	579	23.4
Total	728	100.1	1745	100.0	2473	100.0

The large majority in both Services (76.7% Navy and 85.7% Air Force) had lived in their current permanent housing for 9 months or longer, adequate time to have settled in and adjusted through different seasons of the year.

### Housing Type and Preference

Table U-12 shows the distribution of the type of housing the respondents were currently living in and their preferences with respect to housing type by Service and pay grade.

Approximately one-half of both service samples were living in economy housing at the time of the survey. Greater percentages of Navy respondents lived in "other" housing (e.g., R.A.F.) than did the Air Force respondents. This may reflect the differing locations of the two Services in the United Kingdom. Navy respondents are more frequently located near strategic seaports or major metropolitan areas where U.S. government-owned and government-leased housing may not be as plentiful as economy and R.A.F. housing compared to the rural locations of Air Force installations.

With respect to preferences, in the Navy sample, economy housing was the most preferred type of housing, followed by government-owned housing. Government-leased and "other" types (e.g., R.A.F.) were the least preferred. By pay grade, all groups showed approximately equal percentages currently living in and preferring to live in economy housing, except for the E-1 to E-3 respondents. This group showed the greatest preference for government-owned housing as well as the greatest disparity between where they lived and where they preferred to live in the two major categories of housing--government-owned and economy. In general, preference for government-owned housing declined as pay grade increased.



Table U-10

## Preferences After Completion of the Current Tour (Q21)

Preference	Navy		Air Force		Total	
	n	%	n	%	n	%
Another full tour in present country	64	7.7	95	4.8	159	5.7
Extend (for less than a full tour) in current location	73	8.8	159	8.0	232	8.2
Another full tour in a different foreign country	149	18.0	237	11.9	386	13.7
Return to CONUS	393	47.5	1193	60.0	1586	56.3
Leave the Service	71	8.6	133	6.7	204	7.2
Unsure/no preference	78	9.4	171	8.6	249	8.8
Total	828	100.0	1988	100.0	2816	99.9

Among Navy respondents, the most often selected alternative was to return to CONUS (56 to 62% among officers and 37 to 54% among the enlisted). The second most popular alternative was another full tour in a different foreign country (11 to 13% among officers and 20 to 21% among the enlisted). The E-7 to E-9 pay grade group showed the greatest response diversity across the alternatives with 22.4 percent preferring to extend at the current location or to do another full tour in the present country. Respondents planning to leave the Service were most often found among the E-7 to E-9 and W-2 to W-4 pay grades. Since a large percentage of these respondents had already served 20 years or more, this is undoubtedly a reflection of retirement plans.

Among Air Force respondents, the majority in all pay grades reported a preference for returning to CONUS (54 to 64%). The E-7 to E-9 pay grades more often than the other pay grades reported plans to leave the Service. Again, this most likely reflects their retirement plans.

### PERMANENT HOUSING

Beginning with this section, data are based only on the accompanied service member responses. Data on the unaccompanied are presented with special groups (p. 73).

This section presents data concerning service members' housing and their preferences for housing types. Housing type refers to U.S. government-owned/managed, U.S. government-leased, economy (civilian) housing and "other" housing, including R.A.F. housing. U.S. government-owned housing is usually located on the installation; government-leased housing is usually civilian housing, foreign built, and located off-base with the economy and "other" types of housing.

Table U-9  
Career Intentions (Q20)

Intention	Navy		Air Force		Total	
	n	%	n	%	n	%
Definitely do not intend to remain in the Service for at least 20 years	36	4.3	46	2.3	82	2.9
Probably will not remain in the Service for at least 20 years	20	2.4	54	2.7	74	2.6
Uncertain	71	8.6	219	11.0	290	10.3
Probably will remain in the Service for at least 20 years	166	20.0	400	20.1	566	20.1
Definitely intend to remain in the Service for at least 20 years	358	43.2	916	46.0	1274	45.2
Have already served 20 years or more	177	21.4	357	17.9	534	18.9
Total	828	99.9	1992	100.0	2820	100.0

For the Navy respondents, the E-1 to E-3, E-4 to E-6, and O-1 to O-3 pay grade groups were the most often negative or uncertain. Approximately 8.3 percent of the E-1 to E-3s, 14.0 percent of the E-4 to E-6s, and 7.8 percent of the O-1 to O-3s were negative; over one-half (54.2%) of the E-1 to E-3s, 15.2 percent of the E-4 to E-6s, and 5.2 percent of the O-1 to O-3s were undecided. The pay grade groups with substantial numbers who had already served 20 years consisted of E-7 to E-9s (35.0%), warrant officers (66.7%), and O-4 to O-6s (36.4%).

For the Air Force respondents, the E-1 to E-3 respondents were both the most often negative and the most undecided (13.9% negative and 35.1% undecided), followed by the E-4 to E-6s (7.5% negative and 15.0% undecided) and the O-1 to O-3s (3.5% negative and 15.5% undecided). The E-7 to E-9s and O-4 to O-6s had most often already served 20 years or more (43.8 and 25.6% respectively).

The low return rate for the E-1 to E-3 service members in both Services and the E-4 to E-6 service members in the Navy sample means that these response patterns may not accurately represent their entire populations.

#### Preferences After Completion of the Current Tour

Table U-10 shows the distribution of responses to the question about preferences after completion of the current tour. The most frequent preference across Services and pay grades was to return to CONUS. However, pay grade differences were evident in both Services.

Table U-8  
Special Groups

Special Group Identification	Navy		Air Force		Total	
	n	%	n	%	n	%
Accompanied female service members	52	7.0	67	3.7	119	4.7
Accompanied single parents	19	3.2	35	2.4	54	2.6
Service members with local national spouses	127	16.9	357	18.5	484	18.0
Service members with nonsponsored dependents	10	1.3	46	2.5	56	2.1
Respondents planning to leave the Service (excluding those with 20 years or more of service)	36	6.1	79	5.2	115	5.4
Unaccompanied service members	45	5.8	104	5.5	149	5.6

### Service History

Service history included three factors dealing with time: prior time in foreign locations, time at present duty station, and time remaining in the current tour.

#### Prior Foreign Experience (Q17)

Overall, the majority of both samples had adapted to foreign living with many of the respondents having extended or repeated foreign tours. Less than one-third (29.3% Navy and 30.5% Air Force) were serving their first overseas tour, while large percentages (57.4% of the Navy and 45.4% of the Air Force) had had 2 years or more of prior service in foreign locations.

#### Time Spent/Remaining in the Current Tour (Q18-Q19)

Nearly one-half (49.7%) of the Navy sample and 63.7 percent of the Air Force sample had been at their present duty station for a year and a half or longer. Approximately 15 percent of the Navy compared to less than 1 percent of the Air Force had been at their present duty station for 6 months or less. For the Navy respondents, approximately one-quarter had 6 months or less left in their current tour and nearly one-half reported 16 months or more remaining in the tour. Among the Air Force respondents, 17.9 percent had 6 months or less left in their current tour and 55.7 percent reported 16 months or more remaining in the current tour.

### Military Career Intentions

The respondents from both Services were also highly career motivated. Table U-9 shows that the overwhelming majority of both samples had positive career intentions or had already served 20 years or more. Negative career intentions were uncommon.

Table U-6  
Median Family Income by Pay Grade Group (Q147)

Pay Grade Group	Navy		Air Force		Total	
	n	\$	n	\$	n	\$
E-1 to E-3	23	1,107	183	1,239	206	1,232
E-4 to E-6	235	1,402	469	1,439	704	1,420
E-7 to E-9	197	1,980	460	2,000	657	1,998
W-2 to W-4	18	2,590	--	--	18	2,590
O-1 to O-3	73	2,697	261	2,682	334	2,685
O-4 to O-6	132	4,001	292	3,518	424	3,645

Table U-7  
Spouse Income by Pay Grade Group (Q148)

Pay Grade Group	Navy		Air Force		Total	
	n	%	n	%	n	%
<u>No Income</u>						
E-1 to E-3	20	80.0	113	67.3	133	68.6
E-4 to E-6	225	65.8	254	60.2	479	62.1
E-7 to E-9	136	71.2	260	58.6	396	62.4
W-2 to W-4	12	75.0	--	--	12	75.0
O-1 to O-3	51	69.6	162	64.8	213	65.9
O-4 to O-6	130	82.3	212	73.6	342	76.3
Total	574	71.3	1001	63.7	1575	66.2
	n	\$	n	\$	n	\$
<u>With Income</u>						
E-1 to E-3	4	580	55	403	59	404
E-4 to E-6	77	472	168	503	245	501
E-7 to E-9	55	450	184	601	239	596
W-2 to W-4	4	480	--	--	4	480
O-1 to O-3	22	505	88	748	110	715
O-4 to O-6	23	730	76	605	99	670
Total	185	504	571	576	756	576

By pay grade group, senior officers were generally the most satisfied group. The E-4 to E-9 enlisted respondents and the O-1 to O-3 officers were more dissatisfied than were senior officers with convenience of their lodgings to the installation and government facilities and with costs. The E-7 to E-9 respondents were also more dissatisfied than were senior officers with personal safety/security and overall comfort and adequacy of their quarters. Size of the quarters was more of a source of dissatisfaction among the E-7 to E-9 enlisted and junior officers than among senior officers.

Grouping the Satisfaction Items. A factor analysis procedure to develop meaningful groupings of individual items was applied to the 11 satisfaction items. This procedure produces groupings of items that respondents answered similarly. The resulting groups of related items can be interpreted as major themes that characterize the satisfaction responses. For both Services, the results showed two groups of items (factors) that accounted for the interrelationships among the 11 items. The first group, which included overall satisfaction, can be interpreted as a general feeling of satisfaction-dissatisfaction that permeated the responses of most of the individual items (e.g., with privacy, kitchen facilities, etc.). The second group (factor) contained the two convenience items (i.e., convenience of the temporary lodgings to the installation and government facilities). Since most of the items are clustered into the first factor, the second factor (convenience) may be interpreted as being perceived by the respondents as a separate issue from the first.

Predicting Overall Satisfaction. Multiple regression is a general statistical technique for analyzing the relationship between one variable and a set of other variables. One purpose of the procedure is to predict or describe the outcome (overall satisfaction) on the basis of other variables. This technique was used to determine which item(s) in the questionnaire best described the respondents' overall satisfaction with the comfort and adequacy of their temporary lodgings. In addition to the 10 individual satisfaction items used in the regression analysis, selected demographic characteristics (i.e., with or without children, number of live-in dependents, pay grade, type of temporary lodgings, time in temporary lodgings, and the effects of the temporary lodging experience) were also included.

1. Navy. In the Navy sample, the results showed that satisfaction with the size of the temporary lodgings was the most powerful predictor of overall satisfaction (correlation = .69). Other items that contributed to the prediction, in descending order of importance, were cleanliness; kitchen, eating and cooking facilities; cost; and personal safety/security. Taken together, these five aspects of the temporary lodgings correlated highly with overall satisfaction (correlation = .81), with size being the most important component by far.

2. Air Force. In the Air Force sample, size of the temporary quarters was again the best predictor of overall satisfaction and even more powerful than among the Navy respondents (correlation = .72). Other aspects contributing to the prediction were, in descending order of importance, cleanliness, privacy, and the convenience of the lodgings to the installation. Taken together, these four variables were highly related to overall satisfaction (correlation = .83), with size being the most powerful component.

#### Effects of the Temporary Lodging Experience

Table U-19 shows how the respondents reported the effect of their temporary lodging experiences on their permanent housing choices and on their attitude toward living overseas.

Table U-19  
Effects of the Temporary Lodging Experience

Service/ Pay Grade	n	Responses (%)		
On Permanent Housing Choice (Q110)				
		<u>Less than Satisfactory</u>	<u>No Effect</u>	<u>Satisfactory Choice</u>
<u>Navy</u>				
E-1 to E-3	10	30.0	50.0	20.0
E-4 to E-6	184	34.2	42.9	22.8
E-7 to E-9	181	35.9	38.1	26.0
W-2 to W-4	12	16.7	66.7	16.7
O-1 to O-3	63	30.2	49.2	20.6
O-4 to O-6	119	22.7	57.1	20.2
Total	569	31.5	45.7	22.8
<u>Air Force</u>				
E-1 to E-3	98	50.0	33.7	16.3
E-4 to E-6	389	40.1	42.9	17.0
E-7 to E-9	382	46.3	35.6	18.1
O-1 to O-3	248	34.7	48.0	17.3
O-4 to O-6	282	22.0	65.6	12.4
Total	1399	37.9	45.7	16.7
<u>Total</u>				
E-1 to E-3	108	48.1	35.2	16.7
E-4 to E-6	574	38.2	42.9	19.0
E-7 to E-9	563	43.0	36.4	20.6
W-2 to W-4	12	16.7	66.7	16.7
O-1 to O-3	311	33.8	48.2	18.0
O-4 to O-6	401	22.2	63.1	14.7
Total	1969	36.0	45.7	18.3
On the Respondent's Attitude (Q111)				
		<u>Worsened</u>	<u>No Effect</u>	<u>Improved</u>
<u>Navy</u>				
E-1 to E-3	11	27.3	63.6	9.1
E-4 to E-6	187	21.4	65.2	13.4
E-7 to E-9	180	13.9	77.8	8.3
W-2 to W-4	12	0.0	83.3	16.7
O-1 to O-3	62	8.1	80.6	11.3
O-4 to O-6	120	18.3	72.5	9.2
Total	572	16.6	72.7	10.7
<u>Air Force</u>				
E-1 to E-3	97	23.7	70.1	6.2
E-4 to E-6	389	28.3	66.3	5.4
E-7 to E-9	382	23.8	72.5	3.7
O-1 to O-3	248	29.8	64.1	6.0
O-4 to O-6	282	23.4	70.2	6.4
Total	1398	26.0	68.7	5.3
<u>Total</u>				
E-1 to E-3	108	24.1	69.4	6.5
E-4 to E-6	577	26.0	66.0	8.0
E-7 to E-9	562	20.6	74.2	5.2
W-2 to W-4	12	0.0	83.3	16.7
O-1 to O-3	310	25.5	67.4	7.1
O-4 to O-6	402	21.9	70.9	7.2
Total	1971	23.3	69.9	6.8

The temporary lodging experience had a somewhat greater perceived effect on the choice of permanent housing than on the respondents' attitudes toward living overseas. (Navy pay grade differences were not found.) In the Air Force sample, the number of respondents who reported making less than satisfactory permanent housing choices was greater at the lower end of the pay grade scale and decreased as pay grade increased.

The temporary lodging experience was reported more frequently to have had a negative effect on the respondents' attitudes toward living overseas among the Navy E-1s to E-6s (21.4 to 27.3%) than among all other Navy pay grades (8.1 to 18.3%). No pay grade differences were found in the Air Force sample.

Table U-20 illustrates the differences in negative effects as a function of the type of the last temporary lodgings occupied.

Table U-20

Effects of the Type of the Last Temporary Lodging Occupied (Q109-Q110)

Type of Temporary Lodging	Navy	Air Force
Percentage Reporting a Less than Satisfactory Choice of Permanent Housing		
Government-owned lodgings	33.7	34.0
Government-leased lodgings	28.1	50.0
Economy lodgings	31.6	41.0
Percentage Reporting a "Worsened" Attitude Toward Living Overseas		
Government-owned lodgings	14.6	23.9
Government-leased lodgings	21.9	28.6
Economy lodgings	16.9	27.9

The contribution of the temporary lodgings to a "less-than-satisfactory" choice of permanent housing was greater than to a "worsened" attitude toward living overseas for both samples, regardless of the housing type. Navy respondents were less likely to report negative effects of the temporary lodging experience than were the Air Force respondents. Also, in the Air Force, negative effects were more often reported by those who had occupied government-leased quarters than by those in either government-owned or economy quarters. No pay grade differences were found.

Sponsor Program (Q143, Q144)

Respondents were asked two questions regarding their sponsors. The first dealt with the sponsor's attitude toward living conditions at the current post, base, or duty station; the second, with the sponsor's assistance in helping with the incoming family's adjustment to the new situation.

In the Navy sample, approximately 12.6 percent of the enlisted and 2.8 percent of the officers reported they did not have sponsors. In the Air Force sample, 9.7 percent of the enlisted and 4.6 percent of the officers reported having no sponsor. Table U-21 shows that among those with sponsors, officers more often reported that their sponsor had a positive attitude toward living overseas than did the enlisted respondents.

Two general trends were noted in the relationship between the sponsor's attitude and helpfulness and respondents' attitudes and permanent housing choices. Across Services and pay grades, having a positive and/or helpful sponsor was associated with fewer unsatisfactory choices of permanent housing. Also, "worsened" attitudes toward living in a foreign location were more prevalent among respondents with sponsors who were negative themselves, who were unavailable, or who were reported as not helpful to the incoming family.

#### Housing Office Services/Satisfaction With Services and Helpfulness

Three sets of questionnaire item responses are reported in this section. The first two represent the opinions and experiences of those respondents living in economy housing only. Responses from service members living in government-owned and government-leased housing were not included in the data presented below, because they may or may not have used the referral services and, therefore, including them may distort the findings (especially in the nonuse column). The third set includes all the accompanied respondents, regardless of their housing type, since it deals with more general questions about housing.

#### Housing Office Helpfulness

Table U-22 shows the distribution of responses across the six items dealing with the helpfulness of the housing office in providing services to personnel seeking economy housing.

In both service samples, transportation to inspect rentals and help with language interpretation in dealing with landlords were the two services most often reported as not provided. Nonuse of services was somewhat higher in the Air Force sample than in the Navy. However, the nonuse cannot be interpreted. For example, service member nonuse of a service may be based on perception of housing office deficiency or a lack of need for the service. Among the services reported as most provided and most used, ratings of helpfulness were highest for orientation to the local housing market, lease review, and overall assistance in finding economy housing.

Pay grade differences were minimal. The Navy enlisted respondents reported the lease-review service as not provided somewhat more often than did the officers. The percentage reporting that the housing office was helpful overall in finding economy housing generally increased as pay grade increased in the Navy.

#### Economy Housing Listings

Five items on the questionnaire asked the respondents to indicate their satisfaction with aspects of economy housing listings. Table U-23 shows the distribution of their responses.



Table U-21

## Sponsor Attitude and Assistance

Item	Responses (%)					
	Navy		Air Force		Total	
	Enlisted	Officer	Enlisted	Officer	Enlisted	Officer
Q143: Sponsor Attitude	(n = 389)	(n = 207)	(n = 936)	(n = 537)	(n = 1325)	(n = 744)
Negative	36.8	22.2	44.8	30.7	42.4	28.4
Equally negative and positive	20.8	14.5	23.6	19.6	22.8	18.1
Positive	42.4	63.3	31.6	49.7	34.8	53.5
Q144: Sponsor Assistance	(n = 434)	(n = 229)	(n = 1068)	(n = 582)	(n = 1502)	(n = 811)
No help needed	12.0	9.6	9.8	9.1	10.4	9.2
Sponsor unavailable	4.8	6.1	10.1	7.4	8.6	7.0
Not helpful	18.9	16.2	25.9	13.7	23.9	14.4
Helpful	64.3	68.1	54.1	69.8	57.1	69.4

Table U-22  
Housing Office Helpfulness (Q34-Q39)

Housing Office Service	n	Responses (%)			
		Not Provided	Did Not Use	Not Helpful	Helpful
<u>Navy</u>					
Q34: Orientation to the local housing market	364	17.6	11.3	12.9	58.2
Q35: Transportation to inspect rentals	364	63.7	11.0	10.7	14.6
Q36: Language interpretation dealing with landlords	347	52.2	28.5	3.2	16.1
Q37: Lease review and/or rental negotiation	359	18.4	21.7	10.3	49.6
Q38: Overall help finding economy housing	364	8.2	12.1	20.6	59.1
Q39: Help with utility companies	363	43.3	30.0	15.4	11.3
<u>Air Force</u>					
Q34: Orientation to the local housing market	820	11.7	13.9	21.1	53.2
Q35: Transportation to inspect rentals	821	50.7	25.5	15.0	8.9
Q36: Language interpretation dealing with landlords	800	47.5	37.0	3.6	12.0
Q37: Lease review and/or rental negotiation	815	8.6	22.9	13.3	55.2
Q38: Overall help finding economy housing	821	4.9	14.5	33.6	47.0
Q39: Help with utility companies	817	26.2	29.3	26.7	17.9

Table U-23

## Satisfaction with Aspects of Economy Housing Listings

Listing Aspect	n	Responses (%)		
		Dissatisfied	Neutral	Satisfied
<u>Navy</u>				
Q29: Number of listings	330	54.8	13.3	31.8
Q30: Up-to-date information on listings	326	40.5	19.6	39.9
Q31: Size of housing units	331	55.6	19.0	25.4
Q32: Rental costs	336	55.7	19.3	25.0
Q33: Commuting distances from rentals to the installations	339	36.9	23.0	40.1
<u>Air Force</u>				
Q29: Number of listings	768	71.0	11.3	17.7
Q30: Up-to-date information on listings	763	44.7	22.9	32.4
Q31: Size of housing units	779	68.2	15.3	16.6
Q32: Rental costs	772	51.7	23.8	24.5
Q33: Commuting distances from rentals to installations	786	58.3	15.6	26.1

Four of the five items on this list are most influenced by the availability and types of housing units in foreign locations, and, therefore, may be out of the housing office's control. Demand will determine cost to some extent. Dissatisfaction with rental unit sizes is somewhat typical in foreign locations, since housing is generally smaller than in the United States.

Air Force respondents were considerably more dissatisfied with the number of listings and with the commuting distances from rentals to the installation than were the Navy respondents. Service differences in satisfaction levels probably may be attributed to location differences within the host country. Fewer economy rentals are available in the more rural areas typical of Air Force installations and much of what is available may be more dispersed from the installations.

Somewhat separate from the housing market conditions, the single item on the list that reflects on the housing office is the up-to-date information on the listings. Dissatisfaction with this aspect was less than with all other aspects in the Air Force sample and lower than all but one (commuting distances) in the Navy sample.

Pay grade differences were minimal. In the Navy sample, the E-4 to E-6 respondents were more dissatisfied with information on rental listings than were all other pay grades, and the O-4 to O-6 respondents were significantly more dissatisfied with commuting distances from rentals to the installation. This may be less a personal dissatisfaction than a concern for the mission on the part of senior officers. Housing is generally supposed to be located no more than 60 minutes from the installation. While this may be the case under ideal conditions, traffic, weather, and other considerations may make it

less likely for service members to reach the installation in that period of time, in the event of an emergency call-up. In the Air Force, the enlisted respondents were more dissatisfied with rental costs than were officers, and officers were more dissatisfied with the size of rental units than were the enlisted respondents.

Satisfaction With Waiting Time for Government Housing and Assignment and Referral Services of the Housing Office

Table U-24 shows the responses for the total accompanied samples (i.e., regardless of housing type) with respect to satisfaction with waiting time for government housing, assignment, and referral services.

Table U-24

Satisfaction with Waiting Time and Assignment and Referral Services (Q40-Q42)

Item	n	Responses (%)		
		Dissatisfied	Neutral	Satisfied
<u>Navy</u>				
Q40: Length of wait for government housing	479	41.1	11.5	47.4
Q41: Referral services of the housing office	531	44.6	20.0	35.4
Q42: Assignment services of the housing office	454	42.7	22.5	34.8
<u>Air Force</u>				
Q40: Length of wait for government housing	1,459	63.9	9.3	26.8
Q41: Referral services of the housing office	1,341	52.7	23.4	23.9
Q42: Assignment services of the housing office	1,239	47.1	25.3	27.5

Dissatisfaction with waiting time for government housing and referral services of the housing office were higher in the Air Force sample than in the Navy. These Service differences again may partially be a function of the differing locations in the host country and the availability of housing in general.

Reflecting their generally ineligible status for government housing, the only significant pay grade differences were found between the Air Force E-1 to E-3 respondents compared to all other pay grades. This group was considerably more dissatisfied with the length of wait for government housing and the least satisfied of all groups with the assignment services of the housing office.

## SATISFACTION WITH PERMANENT HOUSING, FACILITIES, AND SERVICES

### Satisfaction Levels

Respondents were asked their satisfaction with 31 aspects of their residence and other support facilities and services. Two additional items addressed the satisfaction of the service member and spouse with overall comfort and adequacy of the present residence. Descriptive data on satisfaction, as well as characteristics of the individuals, housing, and experiences related to satisfaction are presented in this section.

### Overall Satisfaction

Table U-25 shows the overall satisfaction levels of service members and their spouses with the comfort and adequacy of their residences. (It is assumed that the service members answered for their spouse on this item.)

Table U-25

Satisfaction with Overall Comfort and Adequacy of the Residence (Q88, Q89)

Respondents	n	Responses (%)		
		Dissatisfied	Neutral	Satisfied
<u>Navy</u>				
Service member	724	32.3	13.4	54.3
Spouse	707	39.7	11.3	48.9
<u>Air Force</u>				
Service member	1,737	28.0	12.4	59.5
Spouse	1,700	34.6	12.1	53.3

The majority of service members and their spouses in both Services were satisfied with their residence. Service members generally reported themselves as satisfied more often than their spouses.

### Overall Satisfaction by Pay Grade Group, Housing Type, and Household Composition.

The perception of greater spouse dissatisfaction than service member dissatisfaction generally held true across pay grade groups, housing types, and household composition. Service members consistently perceived their spouses to be somewhat more dissatisfied with the comfort and adequacy of their residences than they were.

1. Navy. Statistically significant differences in the Navy sample were found as a function of pay grade group, housing type, and household composition (i.e., whether or not the service members had children living with him/her). Both service member and spouse overall dissatisfaction with the residence was higher among the E-7 to E-9 respondents than all other pay grade groups. With the exception of the E-7 to E-9 respondents, a majority of all other pay grade groups were satisfied with the overall comfort and adequacy of their residences.

By housing type, both service member and spouse overall satisfaction was lowest among respondents living in government-leased housing. Although the data do not clearly explain this difference, residents of government-leased housing were more often dissatisfied than their counterparts in government-owned or economy housing with overall residence size, bedroom size(s), living/dining room size, safety/security, privacy, and neighborhood appearance. They also more often than residents of the other two major housing types reported major problems with dependent transportation and greater spouse reliance on the service member for transportation.

By household composition, both service member and spouse overall satisfaction was higher among those without children.

Table U-26 illustrates these differences within the Navy sample.

2. Air Force. No table of results is presented for the Air Force respondents because no significant differences were found by pay grade group, housing type, or household composition for either service members or spouses.

Prediction of Overall Satisfaction. The statistical technique of multiple regression was used to predict or describe the respondents' overall satisfaction with their residence on the basis of other variables. The technique was applied to the 31 satisfaction items and a selected number of demographic items (e.g., pay grade, number of dependents, etc.).

Where the respondents were living (i.e., in government-owned or government-leased, economy, or "other" types of housing) had a powerful influence on which aspects of their housing they considered most (or least) satisfactory. Responses differed most between respondents in government-owned and other types of housing. Therefore, the samples for both Services were divided into two categories for the regression analysis: those in government-owned housing and those in all other housing categories.

Tables U-27 and U-28 present the individual variables that best predicted or described overall service member satisfaction in the order of their predictive value. The Rs at the bottom of the columns are the multiple correlation coefficients for each Service group's analysis. These are indicators of the degree of predictability of the outcome (overall satisfaction) from the combination of variables shown. The correlation coefficients (Rs) show that overall satisfaction is well predicted or described by the combination of variables shown in the column, since 1.00 is the maximum R possible.

Certain other variables that were put into the regression analysis failed to impact the prediction appreciably. These were all remaining variables from the list of 31, as well as pay grade, number of live-in dependents, presence or absence of children in the home, the effect of the temporary lodging experience on attitude, and satisfaction level with overall comfort and adequacy of the temporary lodgings. This is not to suggest that these variables are not important, but rather that across Services and pay grades, overall satisfaction with the comfort and adequacy of the residence is largely a function of satisfaction with the size of that residence.

#### Satisfaction with Aspects of Housing, Facilities, and Services

Grouping the Satisfaction Items. As discussed earlier with temporary lodgings, factor analysis was used to determine the various dimensions involved in the concept of satisfaction. This procedure produced groupings of items that are involved in satisfaction. In this case, all 33 of the items concerned with satisfaction with housing, facilities, and services items were used in the analysis.

Table U-26

Overall Satisfaction with the Residence by Pay Grade Group, Housing Type, and Household Composition: Navy

Factor	Service Member (%)			Spouse (%)				
	n	Dissatisfied	Neutral	Satisfied	n	Dissatisfied	Neutral	Satisfied
<u>Pay Grade Group</u>								
E-1 to E-3	22	22.7	0.0	77.3	22	31.8	4.5	63.6
E-4 to E-6	249	30.1	13.7	56.2	242	36.8	10.7	52.5
E-7 to E-9	221	42.5	15.4	42.1	212	48.6	12.3	39.2
W-2 to W-4	18	27.8	11.1	61.1	18	27.8	22.2	50.0
O-1 to O-3	77	24.7	14.3	61.0	76	35.5	13.2	51.3
O-4 to O-6	137	26.3	11.7	62.0	137	36.5	9.5	54.0
Total	724	32.3	13.4	54.3	707	39.7	11.3	48.9
<u>Housing Type</u>								
Government-owned	82	22.0	18.3	59.8	78	28.2	19.2	52.6
Government-leased	147	40.1	18.4	41.5	144	48.6	13.2	38.2
Economy and other	495	31.7	11.1	57.2	485	39.0	9.5	51.5
Total	724	32.3	13.4	54.3	707	39.7	11.3	48.9
<u>Household Composition</u>								
Without children	115	20.0	13.9	66.1	115	29.6	10.4	60.0
With children	608	34.5	13.3	52.1	591	41.6	11.5	46.9
Total	723	32.2	13.4	54.4	706	38.7	11.3	50.0

Table U-27

Variables Contributing Most to Prediction (Description) of Overall  
Satisfaction with the Residence (Q57-Q87): Navy

Respondents Living in Government- owned Housing	Respondents Living in Government-leased, Economy, or Other Housing
Satisfaction with residence size	Satisfaction with residence size
Satisfaction with external appearance of the residence	Satisfaction with external appearance of the residence
Satisfaction with maintenance and repair services	Satisfaction with the operating condition of the kitchen appliances
Satisfaction with number of kitchen appliances furnished	Satisfaction with the heating system adequacy
Satisfaction with adequacy of the electrical service	Satisfaction with privacy
Satisfaction with neighborhood appearance	Effect of the temporary housing experience on selection of permanent housing
Satisfaction with living/dining room size	
Satisfaction with accessibility to public transportation	
R = .89	R = .82

Table U-28

Variables Contributing Most to Prediction (Description) of Overall  
Satisfaction with the Residence (Q57-Q87): Air Force

Respondents Living in Government- owned Housing	Respondents Living in Government-leased, Economy, or Other Housing
Satisfaction with residence size	Satisfaction with residence size
Satisfaction with the adequacy of the electrical service	Satisfaction with external appearance of residence
Satisfaction with neighborhood appearance	Satisfaction with adequacy of the heating system
Satisfaction with operating condition of kitchen appliances	Satisfaction with convenience of the residence to the installation
Satisfaction with privacy	Effect of the temporary housing experience on selection of permanent housing
R = .82	R = .77



The results showed consistency across both Services. In general, five groupings of items (factors) were found, as shown in Table U-29.

Table U-29  
Groupings of Satisfaction Items (Q57-Q89)

Groupings (Items)
STRUCTURAL ASPECTS OF THE RESIDENCE (Including satisfaction with residence size, room sizes, number of bedrooms and bathrooms, service member and spouse overall satisfaction).
LOCATION/CONVENIENCE (Including satisfaction with convenience of the residence to the installation, government facilities, dispensary/clinic and major medical facilities; availability of child care facilities and services, and transportation time for children being bused to school).
RECREATIONAL FACILITIES FOR CHILDREN (Including satisfaction with availability and number of recreational facilities for teens and preteens, and convenience of the residence to playgrounds and to youth activity centers).
IMMEDIATE PHYSICAL-PSYCHOLOGICAL SURROUNDINGS (Including satisfaction with personal security and safety, degree of privacy, appearance of the residence and neighborhood, and service member and spouse overall satisfaction).
SYSTEMS/COSTS (Including satisfaction with condition and number of appliances, adequacy of laundry facilities, electrical service, hot water supply, heating systems, utility and housing costs, and service member overall satisfaction).

Some service differences and overlapping of items were found. In the Navy sample, service member overall satisfaction was part of the structural aspects grouping and of the systems grouping. Spouse overall satisfaction was also part of the structural aspects group (i.e., size). Additionally, the Navy sample showed only number and condition of kitchen appliances and adequacy of laundry facilities in their systems grouping, while the Air Force included all of the items shown in the grouping above, including costs. In the Air Force sample, service member and spouse overall satisfaction were part of the immediate physical-psychological surroundings grouping. Service member overall satisfaction was also part of the structural aspects grouping.

These service differences may be partially explained by the differential percentages of respondents living in the various types of housing. In particular, fewer of the Navy than Air Force respondents were living in government-owned housing. This could account for overall service member and spouse satisfaction being tied more closely to size variables in the first grouping since British homes are traditionally smaller than U.S. homes. Secondly, the location of the Air Force in more rural areas may account for their more inclusive grouping of utility and housing costs and more household systems. Country homes, in the more rural areas, may be older and less modern in terms of systems, which may add to the utility costs. The shortage of available rentals in these areas may also drive up the rental costs.

Despite the service differences and overlaps, however, the groupings are quite distinct in the data. Satisfaction is multidimensional and involves structural aspects of the residence, systems/costs, location/convenience, number and availability of recreational facilities for children, and the immediate physical-psychological surroundings of the residence.

Thirty-one items asked respondents to rate their satisfaction with specific aspects of their residences, facilities, and services. The following tables show the distribution of responses to these items, arranged in descending order of the percentage dissatisfied.

The first table shown for each Service presents the data for items that were applicable to most respondents (less than 10% reporting "not applicable"). The second table for each Service presents data for items that were not applicable to 10 percent or more of the respondents. These latter items applied mainly to respondents living in economy housing (e.g., costs) and/or those having dependent children living with them (e.g., items dealing with children's facilities). Separating the two sets of items puts the percentages satisfied and dissatisfied into a more realistic perspective.

1. Navy responses to satisfaction items. Tables U-30 and U-31 show the aggregated data on the specific satisfaction items for the Navy sample.

Dissatisfaction with aspects of the residence, facilities, and services was also examined individually by type of housing, household composition and pay grade groups. Where the respondents were currently living (e.g., housing type) and whether or not they had children were most important in differentiating the aspects of their housing that they perceived as unsatisfactory. To a large extent, the pay grade differences were merely reflections of the other two factors (housing type and household composition).

In the Navy sample, 50.6 percent were living in economy housing, 20.2 percent in government-leased housing, 18.0 percent in host R.A.F. housing, and only 11.2 percent in government-owned housing.

Table U-32 shows the percentage of respondents dissatisfied and satisfied with aspects of their housing, facilities, and services by housing type. The percentages who reported being "neither dissatisfied nor satisfied" have been excluded to simplify the table.

In general, respondents living off-base (in government-leased, economy, or R.A.F. housing) were more dissatisfied than their on-base counterparts with household systems and costs (i.e., laundry facilities, heating systems, utility costs), maintenance and repair services, convenience of their residences to support facilities, the availability of child care facilities and transportation time for children being bused to school. Those in government-owned housing were more dissatisfied with privacy, access to public transportation, and neighborhood appearance.

Navy respondents with dependent children were generally dissatisfied with more aspects of their housing than were those who were childless. In particular, they more often expressed dissatisfaction with the overall residence size, bedroom size(s), privacy, and the aspects concerned with support facilities for children (i.e., recreation, play and child care facilities, and transportation time of children bused to school).

Table U-41  
 "Most Serious" Problem for Each Service (Q140)

Problem	Navy (%)	Air Force (%)
Permanent housing	17.9	21.0
Working conditions	15.5	11.1
Living expenses	11.8	9.7
Spouse employment	5.5	6.6
Transportation	5.3	--
Temporary lodging	--	9.6
Initial housing costs	--	9.2
Vehicles	--	6.4

Permanent housing, working conditions, living expenses, and spouse employment were chosen by both service samples as most serious problems. Navy respondents also reported transportation as a problem, while several Air Force respondents reported temporary lodgings, initial housing costs, and vehicles.

### IMPROVEMENTS NEEDED

Respondents were asked to select the four most important areas from a list of 14 in which they felt construction, expansion, leasing, or renovation were needed to improve living and working conditions at their current location. The list included some areas that were listed under "problems" (e.g., child care, recreation, medical facilities, and family housing) as well as some new ones (exchanges, troop barracks, parking, and religious facilities). If respondents had chosen randomly from the list, approximately 28 percent would have selected each area. Therefore, 32 percent or more and 24 percent or less selecting an area represent statistically meaningful indications of choice and nonchoice.

#### Overall Choices of Improvements Needed

Table U-42 shows the percentages of accompanied respondents in each Service who selected each area of improvements needed among their four choices.

Respondents in the two Services had considerably different priorities in terms of selecting the most needed improvements at their current bases. For the Navy respondents, commissaries, family housing, and exchanges were selected far more often than other areas, but the Air Force respondents most frequently selected family housing, parking facilities, and temporary lodgings, with family housing being selected by two-thirds of the sample. Across Services, the lowest priorities were given to dental facilities, troop barracks, and religious facilities. Responses of unaccompanied service members will be discussed with special groups (p. 73).

Table U-40

## Problems by Pay Grade Group: Air Force

Problem (% Overall)	Responses (%)				
	E-1 to E-3 (n = 179)	E-4 to E-6 (n = 455)	E-7 to E-9 (n = 448)	O-1 to O-3 (n = 252)	O-4 to O-6 (n = 255)
Permanent housing (39.3)	40.8	35.4	35.0	44.8	47.1
Living expenses (32.8)	48.0	38.9	34.8	22.2	18.0
Initial housing costs (30.2)	30.2	35.2	31.7	25.8	23.1
Temporary lodgings (24.5)	7.3	20.0	29.5	29.4	31.0
Vehicles (23.0)	28.5	25.9	24.1	17.5	17.3
Spouse employment (21.0)	24.0	16.9	21.7	28.2	17.6
Working conditions (20.6)	10.1	21.3	23.2	20.2	22.4
Transportation (15.5)	21.2	17.1	18.1	11.9	7.5

Permanent housing was the most serious problem reported in all pay grade groups. Problems with living expenses and initial housing costs were more prevalent among the enlisted than the officer pay grades. The E-1 to E-3 respondents were less likely (than all other pay grade groups) to report temporary lodgings and working conditions as problems. The O-4 to O-6 respondents were less likely than others to report problems with transportation.

By housing type, no differences were found with respect to the most significant problem: That was permanent housing. However, the succeeding choices varied as a function of housing type. Those in government-owned or government-leased housing reported temporary lodgings and initial housing costs as moderately problematic. Those in economy housing reported both living expenses and initial housing costs as presenting considerably more problems than did those living in the other types of housing.

Respondents with children reported problems with permanent housing, child care, and schools more often than those without children. Those without children reported vehicle and spouse employment more often as problems.

#### Reporting of the Most Serious Problem (Q140)

The first problem selected of the three was labeled "most serious." Table U-41 presents the problems most frequently reported as the most serious. In this case, each of the 21 listed problems would be expected to show about 5 percent selection (1 in 21) if choices were made randomly or if each individual had problems different and unique from everyone else.

Table U-39

## Problems by Pay Grade Group: Navy

Problem (% Overall)	Responses (%)					
	E-1 to E-3 (n = 20)	E-4 to E-6 (n = 232)	E-7 to E-9 (n = 185)	W-2 to W-4 (n = 13)	O-1 to O-3 (n = 61)	O-4 to O-6 (n = 108)
Living expenses, including utilities (36.8)	55.0	37.9	35.7	30.8	32.8	36.1
Permanent housing (34.4)	20.0	29.7	37.3	46.2	39.3	38.0
Working conditions (28.6)	40.0	31.5	28.1	7.7	27.9	24.1
Spouse employment (21.0)	30.0	21.6	20.5	15.4	23.0	18.5
Initial housing costs (18.6)	5.0	16.4	21.1	38.5	23.0	16.7
Transportation (17.4)	15.0	13.4	22.2	15.4	11.5	22.2
Medical/dental care (16.2)	15.0	16.4	17.8	30.8	11.5	13.9
Shopping (14.9)	5.0	18.1	13.0	38.5	16.4	9.3
Vehicles (14.7)	25.0	15.9	14.6	0.0	9.8	14.8
Recreation and entertainment (14.1)	10.0	16.8	15.7	15.4	13.1	6.5

Table U-38

Problem Areas Selected as One of the Three Most Serious (Q140-Q142)

Problem	Navy		Air Force	
	%	Rank	%	Rank
Living expenses (including utilities)	36.8	1	32.8	2
Permanent housing	34.4	2	39.3	1
Working conditions	28.6	3	20.6	7
Spouse employment	21.0	4	21.0	6
Initial housing costs (deposits, fixtures, etc.)	18.6	5	30.2	3
Transportation	17.4	6	15.5	8
Medical/dental care	16.2	7	10.7	12
Shopping	14.9	8	8.7	14
Vehicles (shipping, insurance, inspection)	14.7	9	23.0	5
Recreation and entertainment	14.1	10	8.9	13
Family adjustment to the new situation	13.4	11	13.8	9
Shipping and storing household goods	12.6	12.5	11.8	11
Temporary lodging facilities	12.6	12.5	24.5	4
Local telephone service	11.6	14	12.5	10
Schools	9.5	15	8.2	15
Child care	8.7	16	6.6	16
Other	3.4	17	1.9	19
Security	3.1	18	1.1	21
Language and cultural differences	2.7	19	1.2	20
Separation and related problems	2.1	20.5	3.5	17
Utility services (other than costs)	2.1	20.5	3.0	18

## PROBLEMS

### Reporting of Problem Areas

From a list of 21, respondents were asked to report the three most serious problems (in rank order of seriousness) they and their dependents encountered at the present installation. Table U-38 shows the percentage who reported each of the problems as their first, second, or third most serious by Service.

It should be noted that one would expect about 14 percent (3 choices in 21) for each problem if choices were made randomly. Thus, percentages of about 18 percent or more, or of 10 percent or less, are statistically meaningful in terms of expectations based on random choice. The higher and lower percentages indicate definite trends toward reporting or nonreporting of a problem.

Table U-38 shows both similarities and differences between the Services. Living expenses, permanent housing, working conditions, spouse employment, and initial housing costs presented problems for a high percentage in both samples. In the Air Force sample, vehicles and temporary lodgings were also of considerable concern. Frequently selected problem areas tended to involve housing (including temporary lodgings for the Air Force), money/costs, and working conditions.

### Differences by Pay Grade Group, Housing Type, and Household Composition

Tables U-39 for Navy and U-40 for Air Force show the percentages of each pay grade group that reported each of the top-ranked problems. These problems were the ones chosen by at least 14 percent of all respondents across pay grades.

The junior enlisted service members (E-1 to E-3) reported living expenses, working conditions, spouse employment, and vehicles more often than all other pay grades as serious problems. On the other hand, they were considerably less concerned than were the others with initial housing costs and shopping. Warrant officers were more concerned than other pay grade groups with permanent housing, initial housing costs, medical/dental care, and shopping. It should be noted, however, that very few in these pay grade groups answered the items. Their responses should not be considered representative of these pay grade populations.

Officers in pay grades O-4 to O-6 were most concerned with living expenses, permanent housing, working conditions, and transportation and least concerned with recreation and entertainment, shopping, medical/dental care, and vehicles.

Significant differences were found as a function of housing type. Respondents in government-owned housing more often reported problems with local telephone service, working conditions, temporary lodgings, and spouse employment in that order. Those in government-leased housing reported problems with permanent housing, spouse employment, working conditions, and living expenses, in that order. Respondents in economy housing reported their main problems to be living expenses, permanent housing, working conditions, and initial housing costs, in that order, with the percentages reporting living expense problems considerably larger than respondents reporting the other categories of housing.

### Loaner Furniture

Approximately 36 to 38 percent of the Navy sample and 53 to 54 percent of the Air Force sample answered the items dealing with the quantity, condition, and size of loaner furniture used during the period before arrival of their own. Their results are shown in Table U-37.

Table U-37

#### Opinions of Loaner Furniture (Q101-Q103)

Opinion	Navy (%)	Air Force (%)	Total (%)
Q101: Adequacy of the quantity of loaner furniture received while awaiting arrival of their own	(n = 274)	(n = 941)	(n = 1215)
Less than needed	20.4	27.8	26.2
Adequate	70.8	70.5	70.5
More than needed	8.8	1.7	3.3
Q102: Satisfaction with the condition of loaner furniture	(n = 262)	(n = 927)	(n = 1189)
Dissatisfied	29.8	45.2	41.8
Neither dissatisfied nor satisfied	24.8	20.4	21.4
Satisfied	45.4	34.4	36.8
Q103: Appropriateness of the size of loaner furniture provided	(n = 258)	(n = 917)	(n = 1175)
Too small	17.8	21.3	20.5
About the right size	80.6	74.3	75.6
Too large	1.6	4.5	3.8

Complaints about loaner furniture were generally minimal, considering the small number of respondents who answered the items. However, of those who did answer, Air Force respondents were especially dissatisfied with the condition of the furniture supplied to them. Also, the quantity of loaner furniture supplied was much more of an issue in both Services than was the appropriateness of the size of the furniture itself. The Navy sample was too small to break down by pay grade and no pay grade differences were evident among the Air Force respondents.



Table U-36  
Usage of Economy and Government Facilities

Facilities	Navy		Air Force		Total	
	Enlisted	Officer	Enlisted	Officer	Enlisted	Officer
Q90: Food shopping facilities						
Economy	10.5	13.4	2.2	2.7	4.7	5.7
Half and half	34.6	37.5	17.3	13.8	22.5	20.5
Government	54.9	49.1	80.5	83.5	72.8	73.8
Q91: Nonfood shopping facilities						
Economy	33.7	30.0	11.3	10.1	18.0	15.7
Half and half	44.2	50.2	38.5	39.1	40.2	42.3
Government	22.1	19.7	50.2	50.8	41.8	42.0
Q92: Medical/dental facilities						
Economy	12.3	17.6	6.1	1.9	7.9	6.3
Half and half	21.8	18.0	9.4	7.3	13.1	10.3
Government	65.9	64.4	84.5	90.9	79.0	83.4
Q93: School facilities						
Economy	64.5	55.3	16.9	25.2	30.2	33.9
Half and half	6.7	5.3	4.5	9.6	5.1	8.3
Government	28.8	39.4	78.6	65.2	64.7	57.8
Q94: Recreation (sports) facilities						
Economy	35.3	52.3	14.7	16.1	20.7	26.0
Half and half	28.2	24.5	24.7	27.6	25.7	26.8
Government	36.6	23.1	60.6	56.3	53.6	47.2
Q95: Entertainment (theatres, etc.) facilities						
Economy	58.1	78.4	24.7	31.3	34.4	44.5
Half and half	27.0	18.1	33.2	39.8	31.4	33.7
Government	14.9	3.5	42.1	28.9	34.2	21.8
Q96: Religious facilities						
Economy	53.7	56.6	25.2	26.3	33.5	34.6
Half and half	8.9	10.1	12.8	8.0	11.6	8.6
Government	37.4	33.3	62.0	65.7	54.9	56.8
Q97: Library facilities						
Economy	40.4	51.1	6.4	4.6	16.0	17.5
Half and half	24.8	26.2	14.5	15.8	17.4	18.7
Government	34.9	22.6	79.1	79.5	66.6	63.8
Q98: Child care facilities						
Economy	45.3	60.8	29.0	37.7	33.5	42.6
Half and half	11.8	5.4	11.3	18.1	11.4	15.4
Government	42.9	33.8	59.7	44.2	55.0	42.0

Table U-35

Satisfaction with Aspects of Housing, Facilities, and Services (Q57-Q87) by Housing Type (Q44): Air Force

Item	Responses (%)					
	Government-owned (n = 545)		Government-leased (n = 338)		Economy (n = 821)	
	Dissat.	Sat.	Dissat.	Sat.	Dissat.	Sat.
Q57: Overall size of residence	45.7	48.3	47.3	45.6	41.2	51.9
Q58: Bedroom size(s)	47.9	45.1	57.1	36.7	52.5	40.3
Q59: Living/dining room sizes	40.7	51.0	45.0	45.9	41.3	49.1
Q60: Number of bedrooms	28.3	57.8	24.9	61.1	19.7	65.3
Q61: Number of bathrooms	39.6	33.9	24.3	65.3	31.9	55.2
Q62: Operating condition of kitchen appliances	32.2	57.8	28.9	59.0	31.5	50.4
Q63: Number of kitchen appliances furnished	16.1	69.3	15.3	70.2	41.4	30.9
Q64: Adequacy of the laundry facilities	15.9	74.0	27.1	61.1	57.1	27.1
Q65: Availability/quality of government furniture <sup>a</sup>	18.1	15.5	21.9	14.8	25.9	11.8
Q66: Adequacy of electrical service	23.1	65.5	23.1	64.5	23.3	54.3
Q67: Purity of the water	32.3	54.9	32.0	53.8	26.3	54.5
Q68: Hot water supply	21.7	71.7	32.6	59.6	36.5	51.1
Q69: Adequacy of heating system (including insulation)	32.8	58.5	47.3	47.0	62.0	31.4
Q70: Cost of utilities <sup>a</sup>	2.6	18.1	13.6	15.3	64.2	18.0
Q71: Cost of housing <sup>a</sup>	12.2	20.1	15.0	17.4	43.2	36.7
Q72: Maintenance/repair services on residence	39.2	38.6	34.8	36.9	32.5	31.7
Q73: Personal safety/security	11.9	73.8	22.8	60.1	10.5	70.5
Q74: Degree of privacy	36.7	50.5	37.0	50.0	13.3	75.0
Q75: External appearance of the residence	30.5	49.0	20.1	62.4	13.3	74.5
Q76: Appearance of the neighborhood	27.2	51.4	29.3	54.1	9.6	77.2
Q77: Number/availability of recreational facilities for teenage children <sup>a</sup>	56.0	11.2	31.0	6.8	37.1	14.3
Q78: Number/availability of recreational facilities for preteen children <sup>a</sup>	41.3	25.6	58.1	13.0	36.6	14.5
Q79: Convenience of residence to playgrounds <sup>a</sup>	24.3	46.1	46.3	30.1	39.1	23.3
Q80: Convenience of residence to youth activity centers <sup>a</sup>	24.7	44.6	56.9	18.3	40.4	11.3
Q81: Convenience of residence to post, base, or duty station	12.7	74.9	37.6	47.9	43.0	40.7
Q82: Convenience of residence to post or base facilities	16.5	73.4	37.3	48.8	46.7	38.4
Q83: Convenience of residence to medical dispensary/clinic	16.7	73.6	37.0	49.7	45.4	39.1
Q84: Convenience of residence to major medical facilities	44.8	46.2	44.7	39.6	53.4	32.4
Q85: Availability of child care services and facilities <sup>a</sup>	28.2	28.9	38.3	18.9	34.0	15.2
Q86: Transportation time for children bused to school <sup>a</sup>	15.6	22.7	23.9	28.6	19.7	14.0
Q87: Accessibility to public transportation	27.2	43.0	29.8	41.3	26.9	41.7

<sup>a</sup>Not applicable to 10 percent or more of the respondents.

Respondents living in government housing (owned or leased) were more dissatisfied than were those in economy housing with privacy, appearance of their residences, and the number/availability of recreational facilities for children. Respondents living off-base (government-leased or economy housing) were more dissatisfied than were those in government-owned housing with household systems (hot water, heating), costs (utility and housing), convenience of the residence to support facilities and the availability of child care facilities. Respondents living in economy housing showed more dissatisfaction than did those in other types of housing with the number of kitchen appliances, household systems/costs (e.g., laundry facilities, hot water supply, heating, housing, and utility costs), availability and quality of government furniture, and convenience to government facilities.

### Usage of Facilities

A series of items addressed the reliance of service members and their families on government and economy facilities by asking whether or not the facilities were available and their typical level of usage of them. Only one of the nine types of facilities queried, child care facilities, was reported to be unavailable by a meaningful percentage of the respondents (22.2% Navy and 5.6% Air Force).

Table U-36 illustrates that the Navy respondents make considerably greater use of the economy facilities than do the Air Force respondents. (The categories include responses of "always" or "mostly" economy or government facilities.)

The Service differences may again be a reflection of the location of the installations within the United Kingdom. Air Force respondents located in more rural areas of the country may have considerably fewer facilities available to them in the economy.

Pay grade differences in usage of economy facilities are primarily a reflection of the differences in number married to local national spouses. E-4 to E-9 respondents more often than other pay grade groups were married to local nationals and more often reported using economy facilities.

### Use and Satisfaction with Government-furnished and Loaner Furniture

Beyond the single satisfaction item on government furniture in the list of 31 aspects of housing and facilities, service members were asked to respond to five items concerning their attitudes toward and experiences with government-furnished and loaner furniture.

#### Government-furnished Furniture (Q99, Q100)

Respondents in both samples were overwhelmingly using all or most of their own furniture at the time of the survey (96.1% Navy and 99.6% Air Force). Similarly, the respondents overwhelmingly preferred to use all or most of their own furniture (97.3% Navy and 97.8% Air Force) versus government-supplied furniture.

By pay grade, Navy E-1 to E-3 respondents were less likely than other pay grade groups to be using all their own furniture (67% compared to 80 to 90% for all other groups). However, their preferences for using all or mostly their own furniture was comparable to all other pay grade groups.

Table U-34

Satisfaction with Aspects Not Applicable to 10 Percent or More  
of the Respondents (Q57-Q87): Air Force

Housing/Facility/Service Aspect	Responses (%)			
	N/A	Dissatisfied	Neutral	Satisfied
Q78: Number/availability of recreation for preteens	24.9	42.3	15.0	17.9
Q77: Number/availability of recreation for teens	36.3	40.2	12.8	10.7
Q80: Convenience of residence to youth activity centers	23.1	38.5	14.8	23.7
Q79: Convenience of residence to playgrounds	16.8	35.6	15.3	32.3
Q70: Utility costs	33.8	34.4	14.2	17.5
Q85: Availability of child care services/facilities	29.3	32.6	17.8	20.3
Q71: Housing costs	28.8	27.7	16.0	27.4
Q65: Availability/quality of government furniture	43.3	22.4	20.7	13.5
Q86: Transportation time for children bused to school	44.6	19.1	16.5	19.8

By pay grade groups, the most prevalent differences were found between the E-1 to E-3 respondents and the senior enlisted and officer respondents. E-1 to E-3 respondents were consistently more dissatisfied with the systems/costs aspects of their housing, with personal safety/security, and with the convenience of their residences to the installation and government facilities. A second trend evident in the data showed that the enlisted respondents were generally more dissatisfied than were the officers with aspects of their housing having to do with safety, privacy, appearances, and convenience to the installation and government facilities. A third difference noted was that officers were more dissatisfied than were enlisted respondents with the number of bedrooms and bathrooms in their residences. This may be due to greater expectations held by officers as well as their being more likely to have older children.

Air Force respondents with children were more dissatisfied than were those without children with support facility items directly affecting their children (e.g., convenience of the residence to youth, recreation and child care facilities, and the transportation time for children being bused to school).

In the Air Force sample, 47.2 percent were living in economy housing, 19.4 percent in government-leased housing, 2.0 percent in local country housing (e.g., R.A.F.) and 31.3 percent in government-owned housing. Table U-35 shows the percentages of respondents dissatisfied and satisfied with aspects of housing, facilities, and services by the three major housing types. "Other" housing (e.g., R.A.F.) is not included due to the small number ( $n = 34$ ) of residents in that type of housing. The percentages who reported being "neither dissatisfied nor satisfied" are also excluded in order to simplify the table.

By pay grade, the groups with the largest percentages of Navy respondents living in government-owned housing were the E-4s to E-9s. Differences in satisfaction levels were most evident between the E-4 to E-9 and O-4 to O-6 pay grade groups. Specifically, the E-7 to E-9 respondents were more dissatisfied with bedroom and living/dining room sizes than were the O-4 to O-6 service members. The enlisted pay grades E-4 to E-9 were more dissatisfied than were the O-4 to O-6 pay grades with personal safety/security, degree of privacy, and with accessibility of public transportation.

2. Air Force responses to satisfaction items. Tables U-33 and U-34 illustrate the satisfaction levels of the Air Force respondents with respect to aspects of housing, facilities, and services.

Table U-33

Satisfaction with 22 Aspects of Housing, Facilities, and Services (Q57-Q87): Air Force

Housing/Facility/Service Aspect	Responses (%)			
	N/A	Dissatisfied	Neutral	Satisfied
Q58: Bedroom size(s)	0.1	51.8	6.9	41.3
Q69: Heating system adequacy	0.2	49.9	6.9	43.0
Q84: Convenience of residence to major medical facilities	0.4	48.8	12.3	38.5
Q57: Overall size of residence	0.1	43.8	6.6	49.6
Q59: Living/dining room sizes	0.2	41.7	9.0	49.0
Q61: Number of bathrooms	0.1	39.2	10.2	50.5
Q64: Laundry facility adequacy	4.5	37.8	8.4	49.3
Q72: Maintenance/repair services on residence	9.9	35.5	19.9	34.7
Q82: Convenience of residence to government facilities	0.3	35.2	12.7	51.8
Q83: Convenience of residence to dispensary/clinic	0.3	34.3	12.8	52.5
Q81: Convenience of residence to installation	0.9	32.2	13.6	53.3
Q68: Hot water supply	0.2	31.1	9.5	59.2
Q62: Operating condition of kitchen appliances	2.1	31.1	12.3	54.5
Q67: Water purity	0.3	29.5	15.9	54.4
Q63: Number of kitchen appliances furnished	7.3	27.9	13.5	51.3
Q87: Accessibility of public transportation	7.1	27.4	23.3	42.2
Q74: Degree of privacy	0.1	25.5	12.3	62.1
Q60: Number of bedrooms	0.1	23.4	14.5	62.0
Q66: Adequacy of electric service	1.1	23.3	15.9	59.7
Q75: External appearance of residence	0.1	20.3	15.8	63.8
Q76: Neighborhood appearance	0.3	19.3	16.1	64.3
Q73: Personal safety/security	0.1	13.4	17.0	69.4

Table U-32

Satisfaction with Aspects of Housing, Facilities, and Services (Q57-Q87) by Housing Type (Q44): Navy

Item	Responses (%)							
	Government-owned (n = 82)		Government-leased (n = 147)		Economy (n = 366)		Other (n = 130)	
	Dissat.	Sat.	Dissat.	Sat.	Dissat.	Sat.	Dissat.	Sat.
Q57: Overall size of residence	39.0	52.4	55.8	34.7	35.5	59.0	46.2	43.8
Q58: Bedroom size(s)	37.8	53.7	59.2	29.9	39.1	53.0	57.7	36.2
Q59: Living/dining room size	43.9	42.7	55.1	33.4	32.0	59.3	54.6	40.8
Q60: Number of bedrooms	24.4	67.1	25.2	62.6	15.3	74.5	20.8	67.7
Q61: Number of bathrooms	20.7	70.7	27.9	61.2	35.8	54.4	35.4	56.9
Q62: Operating condition of kitchen appliances	12.2	80.5	33.3	53.1	32.3	51.4	46.9	41.5
Q63: Number of kitchen appliances furnished	7.3	80.5	17.0	65.3	33.7	37.0	40.0	39.2
Q64: Adequacy of the laundry facilities	19.5	69.5	40.1	45.6	54.9	26.1	61.5	18.5
Q65: Availability/quality of government furniture <sup>a</sup>	22.0	25.6	24.5	27.2	13.1	9.5	25.4	26.9
Q66: Adequacy of electrical service	18.3	61.0	27.9	52.4	21.0	59.6	30.0	53.1
Q67: Purity of the water	7.3	79.3	21.1	63.3	22.1	61.5	20.8	60.0
Q68: Hot water supply	18.3	75.6	22.4	65.3	35.0	50.8	51.5	40.8
Q69: Adequacy of the heating system (including insulation)	31.7	59.8	48.3	44.2	62.3	29.5	86.9	10.0
Q70: Cost of utilities <sup>a</sup>	6.1	14.6	23.8	17.0	62.4	16.3	69.2	17.7
Q71: Cost of housing <sup>a</sup>	12.2	20.7	16.3	28.6	50.3	32.3	22.3	66.2
Q72: Maintenance/repair services	31.7	45.1	43.8	37.0	37.8	32.3	56.9	25.4
Q73: Personal safety/security	17.1	65.9	32.7	55.8	9.8	69.4	26.2	49.2
Q74: Degree of privacy	53.7	31.7	37.4	44.2	8.7	44.2	35.4	46.2
Q75: External appearance of the residence	17.1	50.0	29.9	49.0	17.2	69.4	33.8	43.1
Q76: Appearance of the neighborhood	22.0	50.0	33.3	49.7	10.7	76.0	35.4	40.0
Q77: Number/availability of recreational facilities for teenage children <sup>a</sup>	52.4	8.5	55.5	6.8	37.9	9.0	52.3	4.6
Q78: Number/availability of recreational facilities for preteen children <sup>a</sup>	46.3	24.4	59.2	14.3	38.4	17.7	54.6	16.2
Q79: Convenience of residence to playgrounds <sup>a</sup>	18.3	57.3	25.2	46.9	33.7	28.0	34.6	36.9
Q80: Convenience of residence to youth activity centers <sup>a</sup>	29.3	35.4	49.0	15.6	41.7	15.5	52.3	14.6
Q81: Convenience of residence to post, base, or duty station	20.7	70.7	30.6	49.7	34.4	46.7	40.8	46.2
Q82: Convenience of residence to post or base facilities	19.5	68.3	37.4	47.6	46.2	40.7	52.3	30.0
Q83: Convenience of residence to medical dispensary/clinic	14.6	75.6	44.9	39.5	49.2	33.3	43.8	37.7
Q84: Convenience of residence to major medical facilities	41.5	37.8	57.1	30.6	61.2	24.6	58.5	28.5
Q85: Availability of child care services and facilities <sup>a</sup>	19.5	36.6	44.9	19.7	28.5	11.7	38.5	16.9
Q86: Transportation time for children being bused to school <sup>a</sup>	6.1	28.0	15.0	23.1	22.1	16.9	14.6	19.2
Q87: Accessibility of public transportation	46.3	31.7	26.5	49.0	15.2	67.4	16.9	60.8

<sup>a</sup>Not applicable to 10 percent or more of the respondents.

Table U-31

Satisfaction with Aspects Not Applicable to 10 Percent  
or More of the Respondents (Q57-Q87): Navy

Housing/Facility/Service Aspect	Responses (%)			
	N/A	Dissatisfied	Neutral	Satisfied
Q70: Utility costs	17.1	49.4	16.9	16.5
Q78: Number/availability of recreation for preteens	25.2	46.4	10.9	17.5
Q77: Number/availability of recreation for teens	37.3	45.7	9.2	7.7
Q80: Convenience of residence to youth activity centers	25.8	43.7	12.9	17.6
Q71: Housing costs	13.9	34.1	15.7	36.3
Q85: Availability of child care services/facilities	31.2	32.6	19.1	17.1
Q79: Convenience of residence to playgrounds	18.4	30.4	14.4	36.7
Q65: Availability/quality of government furniture	41.3	18.6	22.0	18.0
Q86: Transportation time for children bused to school	47.2	17.5	15.4	19.9

Table U-30

Satisfaction with 22 Aspects of Housing, Facilities, and Services (Q57-Q87): Navy

Housing/Facility/Service Aspect	Responses (%)			
	N/A	Dissatisfied	Neutral	Satisfied
Q69: Heating system adequacy	0.1	60.4	7.0	32.4
Q84: Convenience of residence to major medical facilities	1.2	57.7	13.1	28.0
Q64: Laundry facility adequacy	6.3	49.1	11.0	33.6
Q58: Bedroom size(s)	0.0	46.3	8.3	45.4
Q83: Convenience of residence to dispensary/clinic	1.1	43.4	15.3	40.1
Q82: Convenience of residence to government facilities	0.6	42.5	13.7	43.3
Q59: Living/dining room sizes	0.0	42.1	8.7	49.2
Q57: Overall size of residence	0.0	41.9	7.4	50.6
Q72: Maintenance/repair services on residence	6.9	41.7	17.9	33.5
Q68: Hot water supply	0.0	33.5	11.7	54.8
Q81: Convenience of residence to installation	0.3	33.2	16.6	49.9
Q62: Operating condition of kitchen appliances	1.4	32.9	12.5	53.2
Q61: Number of bathrooms	0.0	32.4	9.5	58.1
Q63: Number of kitchen appliances furnished	5.6	28.5	17.9	48.0
Q74: Degree of privacy	0.1	24.4	13.2	62.2
Q66: Adequacy of electric service	0.1	23.7	19.0	57.1
Q75: External appearance of residence	0.0	22.8	18.9	58.3
Q87: Accessibility of public transportation	2.8	21.3	17.5	58.5
Q76: Neighborhood appearance	0.0	21.0	17.8	61.2
Q67: Water purity	0.0	20.0	16.4	63.6
Q60: Number of bedrooms	0.1	19.3	10.5	70.0
Q73: Personal safety/security	0.4	18.2	18.8	62.6



Table U-42  
Choices of Improvements Needed (Q123-Q126)

Improvement Area	Navy		Air Force	
	%	Rank	%	Rank
Commissaries	58.6	1	31.4	4
Family housing	56.5	2	68.4	1
Exchanges	52.5	3	24.3	6
Family entertainment facilities (e.g., bowling alleys, movies)	34.7	4	21.2	9
Medical facilities	32.7	5	20.6	10
Recreation facilities	31.7	6	23.5	8
Parking facilities	30.0	7	56.6	2
Youth facilities	25.3	8	24.2	7
Temporary lodging facilities	23.8	9	48.2	3
Child care facilities	20.3	10	19.0	11
Work areas	14.8	11	31.2	5
Dental facilities	11.2	12	10.0	13
Troop barracks, dorms	5.0	13	18.1	12
Religious facilities	2.4	14	2.0	14

Navy Response Differences by Pay Grade Group, Housing Type, and Household Composition

Table U-43 shows the percent of each pay grade group in each Service who chose each of the top rated improvement areas. These areas were the ones selected by 28 percent or more of the accompanied respondents overall.

There were few major pay grade differences. The junior enlisted (E-1 to E-3) respondents selected family housing more often than did other pay grade groups and recreational facilities less often than did others. At the other end of the pay grade spectrum, the O-4 to O-6 respondents selected family entertainment less often, while agreeing with the other pay grades on the need for improvements in commissaries, family housing, and exchanges. Again, because the number of E-1 to E-3 and W-2 to W-4 respondents answering these questions was extremely small, the results for these pay grades (as well as the E-4 to E-6 group) should not be taken to represent the populations of these pay grades.

Table U-43

Improvements Needed by Pay Grade Group: Navy

Improvement (% Overall)	Responses (%)					
	E-1 to E-3 (n = 22)	E-4 to E-6 (n = 236)	E-7 to E-9 (n = 204)	W-2 to W-4 (n = 16)	O-1 to O-3 (n = 71)	O-4 to O-6 (n = 111)
Commissaries (58.6)	40.9	58.5	59.8	62.5	56.3	61.3
Family housing (56.5)	72.7	55.9	59.3	68.8	60.6	45.0
Exchanges (52.5)	50.0	54.7	52.0	68.8	47.9	49.5
Family entertainment (34.7)	36.4	41.5	33.3	25.0	33.8	24.3
Medical facilities (32.7)	50.0	34.7	32.4	50.0	22.5	29.7
Recreation facilities (31.7)	22.7	29.7	32.4	25.0	32.4	36.9
Parking facilities (30.0)	31.8	31.4	28.9	6.3	26.8	34.2

In the Navy sample, the first three choices of improvements needed (family housing, commissaries, and exchanges) were highly consistent across type of housing (government-owned, government-leased, or economy) and household composition (i.e., with or without dependent children). Fourth choices varied somewhat, however, with respondents with children selecting family entertainment and those without children selecting parking facilities.

Air Force Response Differences by Pay Grade Group, Housing Type, and Household Composition

E-1 to E-3 respondents were considerably less likely than were the other pay grade groups to select temporary lodgings as a needed improvement. However, their selections on all other improvements shown in Table U-44 agreed with their more senior counterparts. At the highest end of the pay grade range, the O-4 to O-6 respondents were somewhat less likely than the other pay grade groups to select commissaries.

Table U-44  
Improvements Needed by Pay Grade Group: Air Force

Important (% Overall)	Responses (%)				
	E-1 to E-3 (n = 169)	E-4 to E-6 (n = 470)	E-7 to E-9 (n = 472)	O-1 to O-3 (n = 262)	O-4 to O-6 (n = 294)
Family housing (68.4)	71.6	64.9	66.5	70.2	73.1
Parking facilities (56.6)	63.9	60.0	52.1	56.1	54.8
Temporary lodgings (48.2)	26.0	44.9	49.4	56.5	57.1
Commissaries (31.4)	37.9	32.3	33.3	31.3	25.5
Work areas (31.2)	27.8	28.9	32.6	30.2	35.4

Differences by the type of housing (i.e., government-owned, government-leased, or economy/other) and whether or not the respondent had dependent children did not change the first three selections of needed improvements. Fourth and fifth selections were also generally commissaries and work areas.

Choice of the "Most Important" Improvement Needed

The first area selected where improvements are needed was labeled as "most important." Table U-45 presents the improvements most frequently selected as most important. Each of the 14 listed in the questionnaire would be expected to be selected by approximately 7 percent of the respondents if they selected at random.

Table U-45

**"Most Important" Improvement by Service (Q123)**

Improvement	Navy (%)	Air Force (%)
Family housing	30.5	38.3
Commissaries	13.8	--
Medical facilities	10.7	--
Exchanges	7.7	--
Temporary lodgings	--	13.2
Parking facilities	--	11.0

Family housing was most often chosen as the "most important" improvement needed in both Services. However, the consensus ended there with Navy respondents selecting commissaries, medical facilities and exchanges, while the Air Force sample chose temporary lodgings and parking facilities.

**POLICY PROPOSALS**

Service members were asked to respond to 10 proposals that would affect housing policies. The first six dealt with the following issues: (1) assignment to government housing based solely on bedroom requirements, (2) extension of eligibility to and construction of government family housing for those in the lowest pay grades who are not ineligible, (3) the same two extension and construction proposals but with mention of realistic negative consequences of these proposals, and (4) no change in assignment procedures for government housing. The remaining four dealt with monetary allowances based on choices made by residents of government housing. Respondents rated each of the 10 proposals on a 5-point scale from "strongly oppose" to "strongly favor," with the midpoint labelled undecided.

Table U-46 shows the percentages of enlisted and officer respondents in favor, undecided, and opposed to each of the assignment policy proposals. The ranks indicate the order of their popularity, from the most popular to the least popular, based on the combined enlisted and officer percentages in favor.

In the discussion of each proposal that follows, the group means (average responses) are considered negative if they are below 3.0 (i.e., on the oppose side of the response scale) and positive if they are above 3.0 (i.e., on the favor side of the scale). Household composition is defined here as with or without children.

Table U-46  
Responses to Policy Proposals Affecting Assignment to Government Housing (Q127-Q132)

Proposal	Rank	Navy (%)						Air Force (%)						
		In Favor			Undecided			In Favor			Undecided			
		Enl.	Off.	Enl.	Off.	Enl.	Off.	Enl.	Off.	Enl.	Off.	Enl.	Off.	
Q127: Extend eligibility for assignment to government family housing to all service members with dependents, regardless of pay grade	1	74.9	65.1	6.3	9.2	18.8	25.6	2	71.5	65.7	7.2	11.8	21.3	22.5
Q128: Assign government family housing solely on the basis of bedroom requirements, but retain designated officer and enlisted housing.	3	51.4	69.0	12.1	6.9	36.5	24.1	3	52.6	59.3	13.4	11.5	34.0	29.2
Q129: Construct family housing for personnel (with dependents) in pay grades E-1 to E-3 and E-4 (2 years or less service).	2	63.1	60.6	12.5	11.8	24.4	27.6	1	73.0	70.4	8.0	11.9	18.9	17.6
Q130: Construct family housing for personnel (with dependents) in pay grades E-1 to E-3 and E-4 (2 years or less service), even if it delays construction of all other government family housing.	5	28.9	28.2	18.8	10.0	52.4	61.7	5	42.8	39.0	14.6	14.3	42.5	46.7
Q131: Extend eligibility for government family housing to personnel (with dependents) in pay grades E-1 to E-3 and E-4 (2 years or less service), even if time on the waiting list increases for everyone else.	4	47.8	39.8	13.3	13.7	38.9	46.4	4	49.6	44.0	12.0	13.9	38.4	42.1
Q132: Make no change to the existing assignment procedures for government family housing.	6	21.8	28.3	18.2	24.4	60.0	47.3	6	15.7	18.8	14.6	20.8	69.7	60.4

Proposal 1 (Q127): Extend Eligibility for Assignment to Government Family Housing to all Service Members with Dependents, Regardless of Pay Grade.

Navy

The unconditional extension of eligibility for government family housing to all military members with dependents was the most popular of all the assignment proposals among the Navy enlisted respondents (74.9% in favor) and the second most popular among Navy officers (65.1% in favor). By pay grade group, the E-1 to E-6 respondents were significantly more in favor of the proposal than were the O-4 to O-6 respondents and the E-4 to E-6 group was more in favor than the senior enlisted and all officer groups. Warrant and O-4 to O-6 officers were the only groups with negative mean responses (2.6 and 2.4 respectively). By housing type, residents of government-leased housing were also significantly more in favor than were those respondents currently living in government-owned housing. No differences were found as a function of household composition (i.e., with or without children).

Air Force

Among Air Force respondents, this proposal was the second most popular of the assignment proposals (71.5% enlisted, 65.7% officers in favor). Considerable variability was found by individual pay grade group: The lower grade enlisted (E-1 to E-6) and junior officers (O-1 to O-3) favored the proposal significantly more than did the senior enlisted; the E-1 to E-6 respondents favored the proposal more than did the senior officers; and the E-1 to E-3 respondents favored it more than O-1 to O-3 officers. All pay grade group means were on the positive side of the response scale (3.4 to 4.3). Residents of economy housing also favored the proposal more than did those living in government-owned or government-leased housing. No differences were found by household composition (i.e., with or without children).

Proposal 2 (Q128): Assign Government Family Housing Solely on the Basis of Bedroom Requirements, but Retain Designated Officer and Enlisted Housing.

Navy

Assignment of government housing by bedroom requirement was the most popular assignment proposal among Navy officers (69.0% in favor) and the third most popular among enlisted respondents (51.4% in favor). Mean pay grade group responses were positive (3.2 to 3.4) for all three officer groups, neutral (3.0) among the E-4 to E-9 respondents, and slightly negative (2.9) among the E-1 to E-3s. No significant differences were found by individual pay grade group, current housing type, or household composition.

Air Force

This proposal was the third most popular of the assignment proposals among both the enlisted (52.6% in favor) and officers (59.3% in favor). By individual pay grade group, the junior officer, (O-1 to O-3) were significantly more in favor than the E-4 to E-6 respondents. All pay grade group means were positive (3.1 to 3.5) except the E-1 to E-3 respondents (2.9). No differences were found by housing type or household composition.

Proposal 3 (Q129): Construct Family Housing for Personnel (with Dependents) in Pay Grades E-1 to E-3 and E-4 (2 Years or Less Service).

Navy

This proposal was the second most popular of the assignment proposals among enlisted respondents (63.1% in favor) and the third most popular among the officers (60.6% in favor). By individual pay grade groups, E-1 to E-3 respondents were significantly more in favor of the proposal than were warrant officers. All pay grade group means, except for the warrant officers, were positive (3.1 to 4.1). No differences were found by current housing type or household composition.

Air Force

This proposal was the most popular of the assignment proposals among both the enlisted respondents (73.0% in favor) and the officers (70.4% in favor). By pay grade group, the E-1 to E-3 respondents were significantly more in favor of the proposal than were all other pay grade groups. All pay grade group means were on the positive side of the scale (3.6 to 4.3). By current housing type, respondents living in economy housing were more in favor of the proposal than were those currently in government-leased housing. No differences were found as a function of household composition.

Proposal 4 (Q130): Construct Family Housing for Personnel (with Dependents) in Pay Grades E-1 to E-3 and E-4 (2 Years or Less Service), Even if it Delays Construction of All Other Government Family Housing.

Navy

This proposal was the least popular of the assignment proposals among the Navy officers (28.2% in favor, 61.7% opposed) and the second least popular among enlisted respondents (28.9% in favor, 52.4% opposed). All pay grade group mean responses were undecided or negative (3.0 to 2.2). No differences were found by individual pay grade group, current housing type, or household composition.

Air Force

The respondents were about evenly split on this proposal. Overall, it ranked fifth in popularity among the six assignment proposals with the enlisted respondents equally in favor (42.8%) than opposed (42.5%) and the officers slightly more opposed (46.7% opposed) than in favor (39.0% in favor). By pay grade group, E-1 to E-3 respondents were significantly more in favor than all other pay grade groups. Only the E-1 to E-3 group mean was positive (3.5) compared to the other pay grade groups (2.6 to 2.9). By housing type, residents of economy housing were significantly more in favor than those living in both government-owned and government-leased housing. Additionally respondents with children in their households were less in favor of the proposal than those without children.

Proposal 5 (Q131): Extend Eligibility for Government Family Housing to Personnel (with Dependents) in Pay Grades E-1 to E-3 and E-4 (2 Years or Less Service), Even if Time on the Waiting List Increases for Everyone Else.

Navy

Navy officer and enlisted respondents showed opposite splits in favor or opposed to this proposal, making it the fourth most popular of the assignment proposals. Nearly one-half of the enlisted personnel favored the proposal (47.8% in favor) compared to 39.8 percent of the officers. However, nearly one-half of the officers opposed it (46.4% opposed), compared to 38.9% of the enlisted respondents. The only significant difference by housing type found that residents of economy housing were more in favor than those living in government-owned housing. Individual pay grade and household composition differences were not found. Pay grade group mean responses were positive (3.1 to 3.4) only for the E-1 to E-6 respondents.

Air Force

This proposal ranked fourth in popularity among the six assignment proposals. Enlisted respondents were somewhat more in favor (49.6%) than opposed (38.4%), while officers generally split equally (44.0% in favor, 42.1% opposed). By pay grade group, considerable variability was found: E-1 to E-3 respondents were significantly more in favor than were E-7 to E-9 and all officer respondents; E-4 to E-6 respondents were more in favor than E-7 to E-9 and O-4 to O-6 respondents; and the junior officers (O-1 to O-3) were more in favor than were the senior enlisted respondents (E-7 to E-9) and senior officers (O-4 to O-6). Senior enlisted and officer pay grade group means were positive (3.1 to 3.6) compared to the negative mean of the E-1 to E-6 respondents (2.7). Residents of economy housing were significantly more in favor of the proposal than those currently living in government-owned or government-leased housing. Additionally, respondents with children in their households were more opposed to this proposal than their childless counterparts.

Proposal 6 (Q132): Make no Change to the Existing Assignment Procedures for Government Family Housing.

Navy

This was the least popular of the assignment proposals among the Navy enlisted (21.8% in favor, 60.0% opposed) and the second least popular among officers (28.3% in favor, 47.3% opposed). By individual pay grade group, the only significant difference found was that the O-4 to O-6 respondents were more in favor of the proposal than were the E-1 to E-3 respondents. In all cases, however, the mean response score for all pay grade groups was on the negative side of the 5-point scale (1.6 to 2.5). No differences were found by current housing type or household composition.

Air Force

This proposal was the least popular of the six assignment proposals among both the enlisted (69.7% opposed) and the officers (60.4% opposed). E-1 to E-3 respondents were significantly more opposed to the proposal than were all other pay grades; E-4 to E-6 respondents were more opposed than the senior enlisted (E-7 to E-9) and senior officers (O-4 to O-6); and junior officers (O-1 to O-3) were more opposed than were senior



officers (O-4 to O-6). All pay grade group means were negative (1.4 to 2.4). Residents of economy housing were also significantly more opposed than were those currently living in government-owned or government-leased housing. No differences were found as a function of household composition.

#### Policy Proposals Affecting Allowances for Government Housing

Table U-47 shows the distribution of enlisted and officer responses to the proposals related to greater choices being given to residents of government housing. The popularity rankings are based on enlisted and officer responses combined.

For both Services, three of the four proposals were favored by a majority of the respondents. These three all involved ways that occupants of government housing could acquire additional money.

In the discussion of each proposal that follows, the group mean (average) responses are considered negative if they fall below 3.0 (e.g., on the "opposed" side of the response scale) and positive if they are above 3.0 (i.e., on the "favor" side of the scale). Household composition here is defined as with or without children.

#### Proposal 7 (Q133): Provide an Annual Utility Allowance (Based on Family Size, Housing Size, and Location) Allowing Retention of Any Amount Not Spent on Utilities and Requiring Out-of-pocket Payment for Any Amount Over the Allowance.

##### Navy

This proposal was the third most popular of the four choice-allowance proposals for both the enlisted (53.0% in favor) and officer respondents (63.8% in favor). No differences were found among individual pay grade groups. All mean responses were positive (3.1 to 3.5), except for the warrant officers (2.8). By housing type, residents of economy housing favored the proposal more than those currently living in government-leased housing. No differences were found as a function of household composition.

##### Air Force

This was the third most popular of the four choice-allowance proposals for both enlisted (51.1% in favor) and officer respondents (60.0% in favor). By individual pay grade groups, the only significant difference found was the O-4 to O-6 respondents were much more in favor of the proposal than the E-7 to E-9 respondents. All pay grade group means were positive (3.1 to 3.3). By current housing type, residents of economy housing were more in favor of the proposal than those living in government-owned or government-leased housing. No differences were found as a function of household composition.

#### Proposal 8 (Q134): Provide a Reasonable Allowance to Occupants for Doing Selected Minor Repairs and Maintenance on Their Units, Over and Above What Would Normally Be Expected of Them.

##### Navy

This was the most popular of the four choice-allowance proposals for both enlisted (76.1%) and officers (70.4%). No differences were found among the individual pay grade groups or by household composition. All pay grade group means were on the positive side of the scale (3.1 to 4.0).

Table U-47

## Responses to Policy Proposals Affecting Allowances for Government Housing (Q133-Q136)

Proposal	Rank	Navy (%)						Air Force (%)					
		In Favor			Undecided			In Favor			Undecided		
		Enl.	Off.	Enl.	Off.	Enl.	Off.	Enl.	Off.	Enl.	Off.	Enl.	Off.
Q133: Provide an annual utility allowance (based on family size, housing size, and location) allowing retention of any amount not spent on utilities and requiring out-of-pocket payment for any amount over the allowance.	3	53.0	63.8	14.3	10.8	32.6	25.3	3	51.1	60.0	16.6	10.6	32.3
Q134: Provide a reasonable allowance to occupants for doing selected minor repairs and maintenance on their units over and above what would normally be expected of them.	1	76.1	70.4	10.7	9.4	13.2	19.2	1	73.2	64.2	10.9	13.7	15.9
Q135: Allow service personnel to get housing with more bedrooms than they are qualified to have if they pay an additional amount of not more than 25 percent of their BAQ.	4	39.7	45.0	13.1	15.5	47.2	39.5	4	30.4	41.5	13.7	10.2	56.0
Q136: Allow service members to retain not more than 25 percent of their BAQ if they live in housing units with fewer bedrooms than they are qualified to have.	2	64.6	64.7	13.8	15.4	21.6	19.9	2	63.8	68.7	13.8	12.4	22.3

### Air Force

Most popular of the four choice-allowance proposals, enlisted respondents were 76.1 percent in favor and officers were 70.4 percent in favor. By individual pay grade group, the E-1 to E-6 respondents were most in favor, significantly more than the O-4 to O-6 group. All pay grade group means were positive (3.4 to 3.8). Residents of economy housing were more in favor than those living in government-owned housing. No differences were found by household composition.

Proposal 9 (Q135): Allow Service Personnel to Get Housing Units With More Bedrooms Than They Are Qualified to Have if They Pay an Additional Amount of Not More Than 25 Percent of Their BAQ.

### Navy

This proposal was the least popular of the four choice-allowance proposals among both the enlisted (30.4% in favor, 56.0% opposed) and the officers (41.5% in favor, 48.4% opposed). No differences were found by pay grade group or current housing type. All pay grade group means were negative (2.5 to 2.8). Respondents with children tended to be more opposed to the proposal than those without children.

### Air Force

This was the least popular of the four choice-allowance proposals; the enlisted respondents were 39.7 percent in favor and 47.2 percent opposed and the officers were 45.0 percent in favor and 39.5 percent opposed. By individual pay grade group, the E-4 to E-6 and both officer groups were significantly more in favor than were the senior enlisted (E-7 to E-9). All pay grade group means were negative (2.1 to 2.8). Residents of economy housing were more in favor than were those living in government-owned housing. No differences were evident by household composition.

Proposal 10 (Q136): Allow Service Members to Retain Not More Than 25 Percent of Their BAQ if They Live in Housing Units With Fewer Bedrooms Than They Are Qualified to Have.

### Navy

This proposal was the second most favored of the four choice-allowance proposals (64.6% enlisted and 64.7% officers in favor). No differences were found by individual pay grade group. All pay grade group means were positive (3.1 to 3.6), except the E-1 to E-3 group (2.9). Residents of government-leased housing were more in favor of this proposal than were those living in economy housing. No differences by household composition were found.

### Air Force

This was the second most popular of the four choice-allowance proposals (enlisted 63.8% in favor, officers 68.7% in favor). No differences were found by individual pay grade group, current housing type, or household composition. All pay grade group means were on the positive side of the response scale (3.1 to 3.6).

## **SPECIAL GROUPS**

### **Navy**

As shown on Table U-8, a very small number of respondents in the Navy sample fell into the special group designation except for a relatively high number with local national spouses (17.5%, n = 127). Sample sizes vary widely as a function of the items used to define the special groups. Not all respondents answered the items that were used for the definitions. As a result of this, the number comprising the total sample for each group also varies widely.

#### **Accompanied Female Service Members**

Accompanied female service members made up 7.0 percent (n = 52) of the sample, which is not a large enough group for analysis; however, a few comparisons to accompanied male service members and trends are noted here. The female service members were most often found in the E-4 to E-6 and O-1 to O-3 pay grade groups, were more likely than males to be separated, divorced, or widowed and/or to have changed their marital status since arrival at the base. They were also more often single parents, members of dual career couples, and/or had no children. More frequently than males, they were sharing living expenses with other than dependents, living in economy housing (in neighborhoods with a mix of Americans and local nationals), and reported being uncertain or negative about their military career intentions.

In general, their attitudes and opinions were not appreciably different from their male counterparts. They reported somewhat heavier usage of government entertainment and library facilities than males. Unlike males, they reported their most serious problem to be child care (16.0%) and the most important improvement needed as child care facilities (25.0%).

#### **Accompanied Single Parents**

Accompanied single parents made up only 3.2 percent (n = 19) of the sample, a number too small for analysis. In general, they were nearly all separated, divorced, or widowed (84.2%) and more likely than their married parent counterparts to report serious problems with child care and living expenses. Single parents were more likely to select family housing, youth facilities, child care, and family entertainment as important improvement areas, compared to married parents' selections of family housing, commissaries, and medical facilities.

#### **Comparisons by Spouse Nationalities**

Spouses in the Navy sample were 72.7 percent U.S. born, 16.9 percent local nationals, and 10.5 percent other foreign nationals. The largest percentage of local national spouses were found in the E-4 to E-9 pay grade groups. Very few female service members were married to local or other foreign national spouses. Slightly more live-in dependents were found among service members with local national spouses (2.8%) and U.S. born spouses (2.6%) than among service members with other foreign national spouses (2.3%). Reliance on the service member, on friends, or on public transportation was higher among local and other foreign national spouses than U.S. born spouses.

Very definite differences in the preferences after completion of the current tour were found as a function of spouse nationality. Service members with local national

spouses more often preferred to extend or do another full tour in the present country. Those with other foreign national spouses preferred another overseas tour in a different foreign country. Respondents with U.S. born spouses generally preferred to return to CONUS.

Service members with local national spouses reported greater usage of economy versus government facilities. All groups selected family housing as the most important improvement needed, and their second and third choices were approximately the same (i.e., commissaries, medical facilities, and exchanges). Of the three groups, the most negative with respect to living conditions was the group married to nationals from other countries. These respondents more often than the others reported a negative effect of living conditions on job performance and an unwillingness to choose the tour again. Service members married to local nationals were the most positive of the three groups.

#### Respondent Accompanied by Nonsponsored Dependents

Only 1.3 percent (n = 10) of the sample fell into this special group. This group was not large enough for analysis or to distinguish trends.

#### Respondents Preferring to Leave the Service (Excluding Those Who Have Already Served 20 Years or More)

The question that asked what the respondents would like to do following completion of the current tour identified respondents who preferred to leave the Service excluding those who had already served 20 years or more (i.e., may be planning to retire). They made up 6.1 percent (n = 36) of the sample.

Although this group was also too small for analysis, two items showed these respondents to be very different from those who did not report a preference to leave the service. They were twice as likely than others to report that living conditions had a negative effect on their career intentions, and they were more likely to report their most serious problem as working conditions.

#### Unaccompanied Respondents

Demographics. The unaccompanied respondent group was also very small (5.8% of the sample, n = 45). The unaccompanied group consisted more often of enlisted (especially E-4 to E-6), females and single parents than did the accompanied group. Over one-half (53.3%) had changed marital status since arrival at the current base. Most (88.6%) were permanently unaccompanied. The majority (70.7%) of the unaccompanied lived in economy housing, with 29.5 percent in barracks. They were more likely than the accompanied to be sharing living expenses.

Reasons for Being Unaccompanied (Q24-Q26). Combining the reasons given for being unaccompanied, 40.5 percent of the respondents reported dependent situations (e.g., spouse job, dependents' special interests, etc.); 37.8 percent, "other" (i.e., unspecified); 15.2 percent, reasons beyond their control (e.g., dependents not command sponsored, service member schedule); and 5.4 percent, preference for being unaccompanied. Approximately one-third (31.8%) reported preferring that their dependents remain in CONUS, but 47.7 percent preferred to be accompanied, and 20.5 percent had mixed feelings.

Impact of Being Unaccompanied on Job Performance (Q28). The majority (53.3%) reported no impact of their unaccompanied status on job performance, 31.1 percent, reported they were less effective; and 15.6 percent, that they were more effective. The three best predictors of how the respondents rated the effect of their unaccompanied status on job performance were their satisfaction level with the overall comfort and adequacy of their residence, their pay grade level, and the prior experience they have had at foreign sites ( $R = .50$ ). Reporting of negative effects of being unaccompanied on job performance was moderately associated with overall dissatisfaction with the residence, lower pay grade levels, and little or no previous experience at a foreign site. The opposites of these variables (i.e., satisfaction with the residence, higher pay grade level, and prior foreign experience) were then associated with reporting of positive effects.

Problems (Q140-Q142)/Improvements Needed (Q123-Q126). The most serious problems of the unaccompanied were living expenses (52.8%), separation (41.7%), permanent housing (30.6%), initial housing costs (25.0%), vehicles (22.2%), recreation and entertainment (19.4%), and working conditions (19.4%). Their selections of the most important improvements needed were exchanges (69.0%), commissaries (50.0%), parking (47.6%), recreational facilities (42.9%), and barracks/dorms (40.5%). Approximately 26 percent of the unaccompanied reported they did not have a sponsor, compared to approximately 10 percent of the accompanied.

Living Condition Impacts (Q137-Q139). The unaccompanied, more often than the accompanied respondents, reported negative career intentions and a negative effect of living conditions on their career intentions. The two best predictors of the living condition effect on career intentions were respondent satisfaction level with the current residence and career intentions. Other variables that contributed, in much smaller amounts, were months unaccompanied, preference for being accompanied or unaccompanied, and the current type of housing ( $R = .54$ ). In particular, reports of negative impacts of the living conditions on career intentions were moderately associated with dissatisfaction with the residence, negative career intentions, fewer months unaccompanied, preference for being accompanied, and living in barracks (as opposed to economy or other housing). The reverse of these variables predicted the reporting of positive impacts of the living condition on career intentions. Similarly, the best predictors of the living conditions' effect on job performance were associated with satisfaction level with the current residence, months left in the current tour, previous experience at foreign sites, and pay grade level ( $R = .64$ ). In other words, dissatisfaction with the residence, fewer months remaining in the current tour, little or no previous experience at foreign sites, and lower pay grade levels were associated with reporting of negative living condition effects on job performance, while the opposites of these variables were associated with reporting of positive impacts.

Policy Proposals (Q127-Q136). A majority (65.7%) of the unaccompanied respondents favored the policy proposals that provided for the unconditional extension of government housing assignment eligibility to E-1 to E-3 and E-4 (with less than 2 years of service) families for construction of E-1 to E-3 and E-4 (less than 2 years of service) housing without impacts on others (59.0%), and for assignment solely on the basis of bedroom requirements (58.3%). Like the accompanied respondents, they were much less in favor of proposals that included waiting time or construction delay impacts and most opposed to retention of the current assignment procedures. With respect to government housing occupant choices, they favored the maintenance allowance (81.6%), the utility allowance (75.6%), and the proposal to allow residents to have fewer bedrooms than they were qualified to have to keep some of their BAQ (62.6%). Exactly one-half of the respondents were opposed to the proposal allowing payment of additional money to have a unit with more bedrooms.

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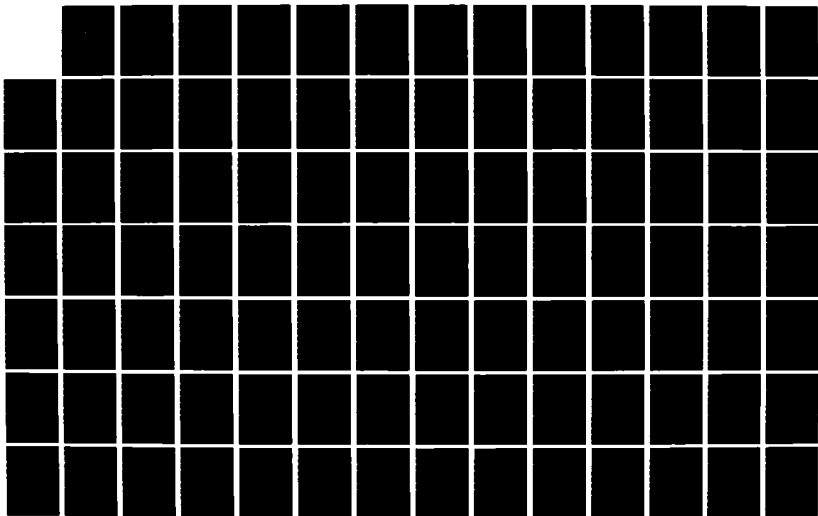
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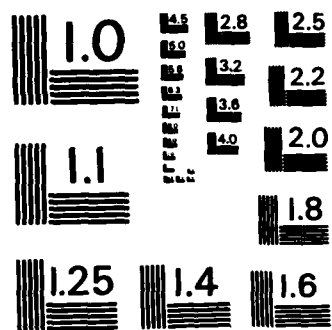
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## Air Force

As in the Navy sample, the largest special group in the Air Force sample consisted of service members married to local nationals.

### Accompanied Female Service Members

Accompanied female service members made up only 3.7 percent (n = 67) of the accompanied sample. In general, they were overrepresented in the E-4 to E-6 pay grades and underrepresented in the E-7 to E-9 pay grades, compared to males. They were, more often than males, separated, divorced, or widowed and more likely than males to have changed their marital status since arriving at the current post, base, or duty station. They also were more often single parents, were members of dual career couples, and had fewer average live-in dependents (1.9) than males (2.6).

Females were also much more likely than males to be sharing living expenses with others than dependents (16.4%), less likely to have spouses unemployed and not looking for work, and more undecided than males about their military careers. No attitude or opinion differences were noted.

### Accompanied Single Parents

Accompanied single parents represented only 2.4 percent (n = 35) of the accompanied sample. This was too small a group for analysis, but a few differences and trends were noted. Single parents were mostly all separated, divorced, or widowed (82.9%) with 17.1 percent single, never married. They had nonsponsored dependents with them (8.8%) more often than did married parents (1.8%). They were sharing living expenses more often than were married parents (8.8 versus 0.7% respectively).

Single parents reported their most serious problem as family housing. Their choices of the most important improvement areas were family housing, followed by child care facilities.

### Comparisons by Spouse Nationalities

The sample included 73.3 percent (n = 1,414) married to U.S. born spouses, 18.5 percent (n = 357) to local nationals, and 8.2 percent (n = 159) to other foreign nationals. The majority of local and other foreign national spouses was found among the E-4 to E-9 pay grades. Among those respondents who had married since arrival at the current post, base, or duty station, most had married local nationals. Most of those married to local nationals had already served 20 years or more in the military. Respondents married to other foreign nationals more often than the other two groups reported their spouses as unemployed and looking for work.

As in the Navy sample, respondents with local national spouses more often preferred to extend or do another full tour in the present country. Those married to other foreign nationals showed greater preference for tours in other foreign countries. Respondents with U.S. born spouses preferred to return to CONUS.

Service members with local national spouses more often lived in and preferred to live in economy housing. Reliance on the service member for transportation was highest (44.5%) among other foreign national spouses, next (36.8%) among local national spouses, and least (28.7%) among U.S. born spouses. Respondents with local national spouses more

often than the other two groups reported higher usage of economy versus government facilities.

Service member dissatisfaction with overall comfort and adequacy of the residence was highest (33.3%) among those married to other foreign nationals, next (29.5%) among those with U.S. born spouses, and least (20.9%) among those with local national spouses. Service members with U.S. born and other foreign national spouses more often reported a negative effect of living conditions on job performance (40.0 and 44.1% respectively) than did those married to local nationals (29.1%). All comparison groups frequently reported permanent housing and working conditions as serious problems. Also, respondents with local and other foreign national spouses also frequently reported living expenses as a serious problem.

#### Respondents Accompanied by Nonsponsored Dependents

Accompanied respondents with nonsponsored dependents made up only 2.5 percent (n = 46) of the sample. Again, this group was too small for analysis, but a few differences and trends are noted. Service members with nonsponsored dependents were twice as likely to be found in the E-1 to E-6 pay grades. Just over one-half had changed their marital status since arrival (52.1% compared to 8.7% with sponsored dependents). More of the nonsponsored families were childless or headed by single parents.

A large majority of the respondents with nonsponsored dependents reported living in economy housing (78.3% compared to 46.6% of those with sponsored families). However, the sponsored families showed a greater preference for economy housing, while the nonsponsored showed a greater preference for government housing. Nonsponsored spouses were reported as relying more on the service member for transportation; sponsored spouses more often drive themselves. The most serious problems reported by those with nonsponsored dependents were vehicles, followed by permanent housing, and living expenses. Among those with sponsored dependents, the most serious problem was permanent housing, followed by working conditions.

#### Respondents Preferring to Leave the Service (Excluding Those Who Have Already Served 20 Years or More)

Respondents who indicated they would like to leave the Service after completion of the current tour excluding those who had already served 20 years or more, made up 5.2 percent (n = 79) of the sample. They were more often in the E-7 to E-9 pay grades than in other pay grades; and they significantly more often reported negative career intentions. They also reported many more dependent transportation problems and spouses who relied on them for transportation. Nearly twice as many reported a negative effect of their living conditions on career intention and were somewhat more likely to report working conditions as their most serious problem.

#### Unaccompanied Respondents

Demographics. Only 5.5 percent (n = 104) of the sample reported they were unaccompanied. They were more often in the E-1 to E-3 and E-7 to E-9 pay grades. Nearly one-half (48.1%) were separated, divorced, or widowed. Most (96.1%) were permanently unaccompanied and just over one-third preferred that their dependents remain in CONUS. Most (70.3%) lived in economy housing and even more preferred to live in economy housing (76.5% compared to the preference for barracks, 16.5%).

Reasons for Being Unaccompanied (Q24-Q26). Overall, combining the items asking for reasons for being unaccompanied, 50.7 percent reported the dependent situation as one of the three reasons (e.g., spouse job, poor timing for dependents to move), 29.7 percent reported "other" (i.e., unspecified), 19.8 percent preferred being unaccompanied, and 9.9 percent reported reasons beyond their control (e.g., dependents not command sponsored, service member schedule).

Impact of Being Unaccompanied on Job Performance (Q28). Just over one fifth reported being less effective in their job performance due to their unaccompanied status. The best predictors of how respondents reported the effect of being unaccompanied on their job performance were, in descending order of importance, months at the present duty station, willingness to choose the tour again, and preference for being accompanied or unaccompanied ( $R = .50$ ). In particular, reporting of negative impacts of the unaccompanied status on job performance was more associated with less time at the present duty station, unwillingness to do the tour over knowing what they know now, and preference for being accompanied. The opposite of these variables predicted reporting of positive impacts of the unaccompanied status.

Problems (Q140-Q142)/Improvements Needed (Q123-Q126). The unaccompanied reported their most serious problems to be separation (42.9%), permanent housing (41.6%), living expenses (40.3%), initial housing costs (28.6%), working conditions (28.6%), and vehicles (23.4%). They selected parking facilities (60.2%), barracks/dorms (48.4%), recreation facilities (40.9%), temporary quarters (39.8%), work areas (38.7%), and exchanges (37.6%) most often as the areas needing improvement. Of those aspects of housing and other facilities that related to the unaccompanied personnel, a majority were dissatisfied with laundry facilities, heating systems, and utility costs. Overall dissatisfaction with the comfort and adequacy of their residences was 30.0%.

Living Condition Impacts (Q137-Q139). Just over one third (35.0%) reported the effect of living conditions on job performance as negative, and 29.1 percent reported a negative effect on their career intentions. Nearly one-half (47.6%) said that, if they had a choice and had it to do over, they would not want to do the tour. The best predictors of how the respondents reported the effect of their living conditions on job performance, in descending order of importance, were career intentions and satisfaction level with the current residence ( $R = .51$ ). In particular, reporting of negative living condition impacts on job performance was associated with more negative career intentions and greater dissatisfaction with the current residence, with the opposites of these variables were associated with reporting of positive impacts. Similarly, reporting a negative effect of living conditions on career intentions was most associated, in descending order of importance, with dissatisfaction with the residence, more negative career intentions, and with little or no previous experience overseas ( $R = .62$ ).

Policy Proposals (Q127-Q136). With respect to assignment policy proposals, the unaccompanied were most in favor of construction of housing for E-1 to E-3 and E-4 (with less than 2 years of service) families that did not adversely impact others (73.9% in favor), for the unconditional extension of eligibility for government housing to E-1 to E-3 and E-4 (with less than 2 years of service) families (66.7% in favor), and of assignment solely on the basis of bedroom requirements (60.2% in favor). Less popular were the proposals that included extension of government housing eligibility with waiting times increases (50.0% in favor), construction of E-1 to E-3 and E-4 (with less than 2 years of service) housing with construction delay impacts on others (43.2% in favor), and retention of the current procedures for government housing assignment (9.3% in favor, 67.4% opposed).

The maintenance allowance proposal was most popular (65.2% in favor) among the policy proposals that affected government housing occupant choices. This was followed by the proposal to allow accepting fewer bedrooms and keeping some of the BAQ (56.0% in favor), and the utility allowance proposal (53.2% in favor). The majority opposed the proposal to allow payment beyond the BAQ for housing units with more bedrooms (29.5% in favor, 56.8% opposed).

### PERCEIVED EFFECTS OF LIVING CONDITIONS

One purpose of the study was to relate the effects of living conditions to military readiness and retention. While these issues were not addressed directly, respondents were asked to evaluate the effects of their living conditions on job performance and military career intentions. Job performance may be considered one component of readiness; and career intentions, as an indicator of potential retention. As an overall measure of satisfaction with living conditions in the present tour, respondents were also asked if they would choose their present assignment again.

Table U-48 presents the distribution of responses of accompanied service members to these three items on the effects of living conditions.

By Service, the responses were very similar, with the Air Force respondents only slightly more negative than were the Navy respondents. Reporting of negative living condition effects on job performance was somewhat more common than on career intentions, but responses on all three items were highly correlated (i.e., respondents who reported negative impacts on job performance also tended to report negative impacts on career intentions and to say they would not choose the present assignment, given a choice and the opportunity to do it over).

#### Differences by Pay Grade Group, Housing Type, and Household Composition

By pay grade, in both Services, reporting of negative impacts on all three living condition effects items generally increased as pay grade decreased.

##### Navy

Navy enlisted respondents reported significantly more often negative impacts on career intentions than did the officers, and they were more likely to report that they would not choose their present assignment again if they had it to do over. By current type of housing, Navy occupants of government-leased housing generally reported more negative impacts than did those living in government-owned or economy housing. Slightly more negative impacts were reported by service members with children than by those who were childless.

##### Air Force

In the Air Force sample, all other pay grade groups reported negative impacts on job performance significantly more often than did the O-4 to O-6 respondents. With respect to effects of living conditions on career intentions, the E-1 to E-3 respondents reported negative impacts significantly more often than did all other pay grades. The enlisted service members were less likely to say they would choose the present assignment again if they had it to over than were officers. In the Air Force sample, however, more negative impacts were reported among those living in economy or government-leased housing than those in government-owned housing. Only slightly more negative impacts were reported among families with dependent children compared to those without children.

Table U-48

## Responses to Living Condition Effects Questions (Q137-Q139)

Question	Navy (%)		Air Force (%)		Total	
	Enlisted	Officer	Enlisted	Officer	Enlisted	Officer
Q137: Which best describes the effect that living conditions on this tour have had on your job performance?	(n = 506)	(n = 234)	(n = 1190)	(n = 600)	(n = 1696)	(n = 834)
Negative	34.0	28.6	40.5	33.5	38.5	32.1
No effect	52.0	44.0	44.7	39.3	46.8	40.6
Positive	14.0	27.4	14.8	27.2	14.6	27.2
Q138: Which best describes the effect that living conditions on this tour have had on your military career intentions?	(n = 506)	(n = 233)	(n = 1188)	(n = 602)	(n = 1694)	(n = 835)
Negative	23.5	8.6	31.6	20.3	29.1	17.0
No effect	66.4	74.7	57.9	65.6	60.4	68.1
Positive	10.1	16.7	10.5	14.1	10.4	14.9
Q139: Relative to living conditions, if you had a choice and you had it to do over, would you choose your present assignment?	(n = 506)	(n = 234)	(n = 1187)	(n = 600)	(n = 1693)	(n = 834)
No	35.4	20.9	46.6	23.3	43.2	22.7
Unsure	10.7	2.6	9.7	6.2	10.0	5.2
Yes	54.0	76.5	43.7	70.5	46.8	72.2

### Explaining the Perceived Living Condition Effects

To explore what is meant by the term "living conditions," the following group of variables that were believed to represent aspects related to these conditions (directly or indirectly) were selected for inclusion in regression analyses: demographic characteristics, time variables, experiences and satisfaction with temporary lodgings, satisfaction with housing office services, characteristics of the residence, spouse and dependent transportation, and overall satisfaction with the residence.

Aggregated across both Services, service member overall satisfaction with the adequacy and comfort of their permanent residence showed the highest relationship (among the group of selected variables) to perceived effects of living conditions on job performance. The more satisfied the individual, the more likely the perception of positive effects.

Both overall satisfaction with the residence and the effects of experiences in temporary lodging on attitude toward living in a foreign location showed the highest relationships to the perceived effects of living conditions on military career intentions and willingness to choose the present assignment. The relationships were positive. Respondents who were satisfied with their residences reported that their living conditions were having positive effects on their job performance and career intentions. Similarly, respondents who reported that their attitude toward living overseas was "worsened" by their temporary lodging experience were more likely to report that their living conditions were having a negative effect.

The relationships mentioned above ranged from .33 to .43 as measured by correlation coefficients. Given that a perfect correlation is 1.00, these coefficients indicate low but statistically reliable degrees of association.

### **DISCUSSION**

In terms of demographics, the Navy and Air Force samples were very similar. That is, they brought the same basic characteristics with them to their new assignments in the United Kingdom (e.g., pay grade distribution, number of dependents, etc.). In general, they were highly career motivated groups. Negativity and uncertainty about making the military a career was most often found among the E-1 to E-3 and E-4 to E-6 respondents in both Services.

To a large extent, the relationships between characteristics, situations, and experiences of the Service members that were predicted in the study model (see Figure 1) were borne out by the quantitative data obtained in the survey. The respondents' basic characteristics were modified to varying degrees by other attitudinal and situational factors (e.g., basic career intentions were high in the samples, spouse employment varied by pay grade group, and local national spouses were found primarily in the E-4 to E-9 pay grades). These factors, in combination, set the stage for differential experiences during the tour of duty overseas. The resulting attitudes (i.e., toward the residence and the tour itself) and perceptions (i.e., effects of living conditions on job performance and career intentions) followed a general pattern that was further influenced by a few key variables.

In the United Kingdom, the key influences on the attitudes and perceptions of the service members toward their living conditions, in both Services, were: (1) the temporary lodging experience and its effects, (2) satisfaction with the overall comfort and adequacy

of the permanent residence and its effects, (3) financial considerations and pay grade differences, and (4) location (i.e., within the country, as well as location of the residence, on or off base). Navy respondents are more often assigned to seaport locations, some in major metropolitan areas, others in resort areas. Air Force personnel are assigned in more rural areas where the space needed for their mission is available. Each of the four key influences above could be traced to other variables in the quantitative and qualitative data to produce groups of characteristics, situations, and experiences that help explain why the service members responded as they did. In the discussion that follows, differences and similarities in the attitudes, opinions, and problems of the Navy and Air Force samples will be explained in terms of these four key influences.

The influence of the temporary lodging experience of service members and their families seems to carry well into their tours. Evidence for this was found throughout the quantitative data. Regardless of the type of temporary quarters occupied (government-owned, government-leased, or economy), personnel are encouraged to limit their stay in these quarters and settle into permanent housing within 30 to 60 days. Depending on the availability of both temporary quarters and permanent housing (government or otherwise) and on the numbers of personnel being rotated in and out, there may be greater pressure periodically to settle into permanent residences. Temporary quarters are also used for those rotating out of an area. This problem is probably more prevalent in rural locations and/or where temporary lodgings are very limited. It can necessitate placement of personnel and their families in units at considerable distances from the installation and the government support facilities. Those rotating out may have already shipped their personal vehicles ahead; those rotating in may still be waiting for the arrival of their vehicles. The problem of vehicles (shipping, etc.) was ranked as the fifth most serious problem faced by the Air Force respondents. Additionally, for those new arrivals still without vehicles, whether or not the housing office provides transportation to inspect potential rentals can be critical to their ability to locate suitable economy housing. In both the Navy and Air Force samples, a majority of the respondents who eventually lived in economy housing reported that the housing office did not provide help with transportation to inspect rentals. Service personnel interviewed in the United Kingdom frequently mentioned having to hitchhike to the installation to go to work during their stay in temporary lodgings. Further evidence of a location problem was found in the quantitative data. Between 25 and 42 percent of respondents who occupied government-leased or economy temporary lodgings reported dissatisfaction with their convenience to the duty station and to government facilities.

In general, dissatisfaction with government-leased and economy temporary lodgings was high in both Services. These units were reported to be deficient in features typically found in permanent housing, such as kitchen, eating, cooking, and laundry facilities, as well as play space for children. Among those respondents for whom these features were available in their temporary lodgings, dissatisfaction with these features was uniformly high. But, of even greater importance to service member satisfaction with the temporary quarters was the size of those quarters. Satisfaction with the size was the single most important component of overall satisfaction with temporary quarters. Because of the dissatisfaction with size and the deficiencies of temporary lodgings, pressure to obtain permanent housing as soon as possible may be generated by the inadequacy of the temporary quarters to meet family needs.

Approximately one-third of the Navy respondents and slightly more of the Air Force respondents reported that their temporary lodging experience resulted in a less-than-

satisfactory choice of permanent housing. In the Air Force sample, unsatisfactory choices of permanent housing were greatest among the E-1 to E-3 respondents and decreased as pay grade increased. The E-1 to E-3 and E-4 to E-6 respondents more often reported being unaccompanied for some period of time prior to the arrival of their dependents. This explains why they were more often housed in government temporary quarters than were the other pay grades who traveled concurrently with their dependents. In interviews with service personnel overseas, many reported being required to obtain housing prior to sending for their dependents. This may, in part, also explain why their temporary housing experiences led to unsatisfactory choices of permanent housing. In an effort to send for their dependents sooner, temporarily unaccompanied personnel may have made hurried choices. Unsatisfactory choices of permanent housing may create the need for a second move later (e.g., to something more affordable or more suitable). The expense for the subsequent move must be borne by the individual. The alternative for the family that has made an unsatisfactory choice is to remain in the unsuitable situation and try to adjust.

In the Air Force sample, temporary lodging facilities was ranked as the fourth most serious problem faced at the current post, base, or duty station, and ranked third among the most important improvement areas. Approximately one-quarter of the Air Force respondents and 17 percent of the Navy respondents reported their experience in temporary lodgings adversely impacted their attitude toward living in a foreign location.

The importance of the temporary lodging experience was further evidenced by service member responses regarding the effects of living conditions on job performance, career intentions, and the willingness to choose the present assignment again. In both service samples, the effect of the temporary lodging experience on attitude toward living in a foreign location was the second most influential component of the perceived living conditions effect on job performance. In both samples, the effect of the temporary lodging experience on attitude toward living in a foreign location was the major influencing variable on perceived living conditions effects on career intentions and on willingness to choose the present assignment again. With respect to these last three findings, the number of respondents who answered all the items used in the analyses was small. However, the pervasiveness of the temporary lodging issue throughout the data, especially in the Air Force sample, implies that it has an influence on the attitudes and perceptions of service personnel.

Satisfaction with the current permanent residence was found to be a multidimensional feeling that included a variety of aspects of the residence, support facilities, and services. This feeling was affected by situational variables, such as housing type (i.e., government-owned, government-leased, or economy housing) and household composition (i.e., with or without children). In general, satisfaction was higher among occupants of government-owned than other types of housing, and respondents with children were less satisfied than were their childless counterparts. Additionally, overall satisfaction affected service member responses to numerous other questions in the survey.

British housing is generally much smaller than typically found in the United States. To accommodate the overall smaller housing sizes and smaller rooms, appliances are also scaled down. For example, it is common to find refrigerators and washing machines in British homes that are one-half to two-thirds the size of those normally seen in American homes. Similarly, central heating is still not typically found in British homes, and very few have any form of air conditioning. In the more rural or remote areas, economy housing may be very old and quite deficient in the modern conveniences to which Americans are accustomed. This is especially the case with respect to heating systems. The cost involved with trying to heat a home without insulation may be prohibitive in this



country where the climate is normally cold and damp. Available rentals in these areas are also frequently widely dispersed. The following comment well describes the situation faced by service members assigned in rural or remote locations:

The largest problem with housing in this area (Holy Loch, Scotland) is that the majority of houses here are either very old (more than 200 years old) or were summer houses, neither of which are insulated. Heating is by coal fires or costly electric portable heaters and are the biggest problem. Whereas my rent is \$450.00/month, utilities (not including water) cost \$600.00/month. Housing availability is very poor. Officers have had to buy local houses because government-leased and civilian rentals were not available. Since housing is in short supply, no improvements are made, hence, problems with heating and utilities exist. (Navy O-4)

As in the United States, in more urbanized areas of the United Kingdom, housing is both more modern and more available. However, rental costs increase as one attempts to move in closer to the urban area (i.e., to the installation and/or support facilities).

The components of satisfaction with the overall comfort and adequacy of the residence involve satisfaction with: (1) structural characteristics of the residence (primarily size), (2) the location/convenience of the residence to the installation and government support facilities, (3) the number/availability of recreational facilities for children, (4) the immediate physical-psychological surroundings of the residence (e.g., privacy, security, appearances, etc.), and (5) household systems (e.g., heating, hot water, kitchens, etc.) and costs. In both Services, the components most closely associated with the general feeling of satisfaction (or dissatisfaction) with the residence were the structural characteristics of the residence (principally size) and systems and costs. One Air Force O-5 offered this suggestion to prepare incoming service families for the housing size and cost situations they would be likely to encounter:

It would help decrease cultural shock (regardless of which country) if a truthful and realistic portrayal of the housing problem was given to people coming overseas for the first time. That is, show pictures, floor plans, room sizes, etc. of the type of housing people will be living in. Also, comments on general living expenses, heating costs, lack of heating, transportation problems, lack of fast food or family-style restaurants, etc. would be helpful. Of course, you would probably lose half of your volunteers then. (Navy O-5)

Approximately one-half of both service samples were living in economy housing at the time of the survey. Reflecting the difficulty Americans have adjusting to British homes, more respondents in every pay grade group preferred to be living in government-owned housing than currently lived in it. This is a departure from the trend found in the United States, where higher graded enlisted and officer respondents generally preferred to live in civilian housing (Lawson et al., 1982).

The preference for government-owned housing is supported and explained throughout the quantitative and qualitative data. Nearly two-thirds of the Air Force respondents and 41 percent of the Navy respondents were dissatisfied with the length of wait for government housing. Dissatisfaction with both the assignment and referral services of the

housing offices was also high in both Services (43 to 53%). The following comment illustrates why waiting time for government housing is considered a problem by many:

There is a total lack of modern, quality housing that one is accustomed to in the U.S.A. The waiting time for on base government housing is over one year! The bottom line is . . . the housing at this base is atrocious! (Air Force O-3)

The single best predictor of overall satisfaction with the current residence was the size of that residence. That is, personnel who were satisfied with the size of the residence tended to be satisfied with the overall comfort and adequacy of the residence, and vice versa. In the following comment, by an Air Force O-5 explains the problem of residence size and gives one perception of the housing office that may partially explain why there is dissatisfaction with assignment or referral services:

Many overseas civilian homes are very small, as is almost all base housing. Therefore, storage space is the primary problem. Garages for preservation of autos are almost nonexistent, even carports would be extremely valuable. Every housing office operates differently and there seems to be no continuity. Family size and the squeaky wheel syndrome seem to have priority . . . unfairly at that. Base housing should be reserved for military personnel, GS ratings make enough to support themselves on the economy. (Air Force O-5)

Respondents with children tended to be more dissatisfied in general than were those without children. In terms of specific aspects of the residence, they were more often dissatisfied with size (especially bedroom sizes) and with support facilities and services that directly related to children. Occupants of government-leased or economy housing (i.e., off base or foreign built) were most dissatisfied with household systems (especially heating), utility and housing costs, and convenience to support facilities. In contrast, occupants of government-owned housing were more dissatisfied with privacy and appearance of their residences. In the following comment, a Navy O-6 explains his dissatisfaction with the number/availability of recreational facilities for children:

There are essentially NO extracurricular activities associated with the public grammar (high) schools in Scotland. And there is very little for teenagers to do in small towns, ours is about 10,000, in terms of entertainment. (Navy O-6)

In the reporting of problem areas, in both Services the two most serious problems faced by the service members and their families were living expenses (including utilities) and permanent housing. Some of the reasons why utility costs and permanent housing are considered serious problems have already been illustrated. But other living expenses impact on service members also such as in this comment:

London is sadly in need of a child care facility. Child care on the economy is much too high and finding a personal sitter is hard. I suggest you look into a centrally located place where working mothers, especially military moms, from both RAF Hendon and RAF Ruislip, can bring their children. I've just had my baby. In three months, I've had three sitters! Either they have to transfer or aren't qualified enough or charge exorbitant amounts that aren't affordable to those just starting out and who are in the lower pay grades. (Navy E-4)

Asked to identify the areas most needing improvement at their current post, base, or duty station, the first choice of the Air Force sample and the second choice of the Navy sample was family housing. (The Navy's first choice was commissaries. This again may reflect their somewhat different situation with respect to being located in areas where housing may be more readily available. The choice of commissaries may also be explained by the weak purchasing power of the American dollar against the British pound at the time of the survey.)

Relative to proposed policies that would affect assignment to government housing, the least popular proposal was the one to maintain current housing assignment procedures. As in the CONUS family housing preference study (Lawson et al., 1982), the two most popular proposals were the integration of the E-1 to E-3 and E-4 (less than 2 years of service) personnel with dependents into the eligibility system and to construct family housing specifically for these pay grades. However, when the potential for negative impacts on other groups (waiting time increases for all, construction delays for all other housing) were mentioned as part of the proposals, support decreased in all pay grade groups.

With respect to the perceived effects of living conditions, approximately one-third of the service members reported a negative effect of living conditions on both job performance and willingness to choose the present assignment again. Overall satisfaction with the current permanent residence was the most important component of the perceived impact of living conditions on job performance in both Services, regardless of housing type. That is, respondents who were generally satisfied with their residences tended to perceive that their living conditions had a positive effect on their job performance, and vice versa. Overall satisfaction also influenced perception of the effect of the living conditions on career intentions and willingness to choose the present assignment again, but to a much smaller degree. As mentioned in the results section, because of the number of respondents who answered all of the items used in the analysis of living conditions effects was relatively small, direct cause and effect relationships should not be assumed. However, the importance of satisfaction with the permanent residence should be considered major since it permeated so many of the responses of the service members. The following comment sums up succinctly the importance of being satisfied with the residence:

Priority should be given to persons E-4 and below for permanent housing. The hardships caused by non-availability of permanent housing, and the high cost of economy housing, combined with moving expenses and transportation problems takes its toll on family life, thus affecting work attitudes. (Air Force E-4)

It should also be pointed out that a majority (53 to 54%) of service members in both service samples reported being generally satisfied with their current permanent residences. Dissatisfaction seems to be with particular aspects. To illustrate, the following comment from an Air Force E-6 provides one perspective on the aspect of residence convenience to government facilities:

I live approximately 10 miles from the installation. I have four teenage children. There is no transportation provided for them to use the recreation center, theatre, etc. Anytime they want to use the facilities, either I or my wife must take them, and then go back and get them. This gets very expensive (gas) and annoying at times. Note: I will not allow my kids to hitchhike! (Air Force E-6)

Some of the financial concerns of the respondents in the United Kingdom have already been mentioned. To a large extent, however, whatever affected large percentages of respondents with respect to financial considerations seemed to impact the most on the lower pay grade groups (especially the E-1 to E-3s and E-4s with less than 2 years of service and with dependents). The comments from the E-4 just cited illustrates this. However, several other findings in the data should be mentioned.

Overall, approximately 15 percent more spouses were reported to be unemployed and looking for work in the United Kingdom than were in the same position in CONUS prior to the relocation. However, in both Services, spouses of E-1 to E-3 respondents more often than all other pay grade groups were unemployed and looking for work. In contrast, officers' spouses were more often employed and/or not seeking employment.

One fundamental service of housing offices in foreign locations is lease review. The majority of the lower enlisted service members who are ineligible for government housing must seek housing in the economy. The Navy enlisted respondents reported more often than did officers that lease review service was not available. Additionally, the number of reports that the housing office was not helpful overall in finding economy housing was generally highest at the lowest end of the pay grade spectrum and decreased as pay grade increased. These findings may reflect communication problems or housing shortages, rather than actual nonprovision of services or deficiencies in the housing offices. Unfortunately, the data do not provide an explanation. Similarly, nonuse of services was relatively high in both service samples. Nonuse may also be a function of the services not being publicized.

In both service samples, the E-1 to E-3 groups showed the greatest disparity between their current housing type and their preferred housing type. That is, they lived in economy housing and preferred government-owned housing. Although ineligible for government housing, apparently they can be assigned after all others have been placed and if there is space available. Pay grade differences with respect to specific aspects of the current residence generally followed the distributions by housing type discussed earlier. That is, since more of the junior enlisted live in economy housing, they (like others in the same type of housing) are more likely to be dissatisfied with household systems, costs, and the convenience of the residence to the installation and government facilities.

As mentioned earlier, the E-1 to E-3 and E-4 to E-6 groups were more likely than other groups to have spent some time unaccompanied before the arrival of their dependents. In contrast, the senior enlisted and officer groups most often are allowed concurrent travel to the United Kingdom.

The preferences of the E-1 to E-3 and E-4 to E-6 pay grade groups were also apparent in their responses to the policy proposals affecting assignment to government housing. They were much more likely than other groups to be in favor of the unconditional extension of eligibility for government housing to those who are currently ineligible and to favor construction of housing specifically for those pay grades. Although their "in favor" responses dropped off when potential negative impacts (longer waiting lists for everyone, delay of construction of all other housing) were included in the wording of the proposals, they generally favored all proposals that would allow them into the eligibility system. In the other pay grade groups, the junior officers tended to favor change of housing assignment procedures more than the senior enlisted or senior officers. These findings generally parallel those found in the CONUS family housing preference study (Lawson et al., 1983), despite the fact that: (1) respondents were asked to consider

Table G-11  
Length of Time in Permanent Housing (Q48)

Time in Permanent Housing	Army		Air Force		Total	
	n	%	n	%	n	%
1 to 6 months	406	17.5	177	12.1	583	15.4
7 to 12 months	608	26.2	413	28.3	1021	27.0
13 to 24 months	717	30.9	486	33.3	1203	31.8
25 months or longer	589	25.4	384	26.3	973	25.7
Total	2320	100.0	1460	100.0	3780	99.9

#### Housing Type and Preference

Table G-12 shows the distribution of current and preferred housing types by Service and pay grade groups.

The majority of the Army respondents were living in government-owned housing, whereas the majority of the Air Force respondents were living in economy housing. Approximately equal percentages in both Services lived in government-leased and "other" types of housing. "Other" housing is combined with economy housing in the table since it would normally be foreign built, located in the economy and/or individually purchased housing.

By pay grade, in the Army sample, the E-1 to E-3 and E-4 to E-6 service members were more likely to live in economy housing than all other pay grade groups. The highest pay grade group (O-4 to O-6) also showed the highest percentage living in government-owned housing. In the Air Force sample, nearly all of the E-1 to E-3 respondents were in economy housing. The E-7 to E-9 respondents were most likely to be in government-owned housing and least likely to be living in the economy.

A majority of the Army respondents expressed a preference for government-owned housing, compared to the majority of Air Force respondents who preferred economy housing. Ten percent more of the Army and 4.7 percent more of the Air Force respondents preferred to live in government-owned housing than actually did. With respect to economy and other housing, 10.3 percent more of the Army and 5.3 percent more of the Air Force preferred to live in economy housing than were currently living in it. Government-leased housing was rarely preferred in either Service.

By pay grade, the E-1 to E-3s in both Services showed the highest percentages not currently living in their preferred type of housing. In contrast, the E-4 to E-6 respondents in both Services and the O-1 to O-3 respondents in the Air Force showed the lowest disparity between current and preferred housing type.

Table G-10

## Preferences After Completion of the Current Tour (Q21)

Preference	Army		Air Force		Total	
	n	%	n	%	n	%
Another full tour in present country	143	5.2	97	5.8	240	5.4
Extend (for less than a full tour) in current location	303	11.0	154	9.2	457	10.3
Another full tour in a different foreign country	176	6.4	162	9.7	338	7.6
Return to CONUS	1712	62.2	977	58.3	2689	60.8
Leave the Service	184	6.7	137	8.2	321	7.2
Unsure/no preference	234	8.5	147	8.8	381	8.6
Total	2752	100.0	1674	100.0	4426	99.9

**PERMANENT HOUSING**

Beginning in this section, data are presented for the accompanied respondents only. Data on the unaccompanied are presented with special groups (p. 152).

This section presents data concerning service members' housing and their preferences for housing types. Housing type refers to U.S. government-owned/managed, U.S. government-leased, economy housing, and "other" types (e.g., housing managed by the host country).

Time in Permanent Housing

Most of the respondents were living in permanent housing at the time of the survey (96.4% Army and 96.2% Air Force). Table G-11 shows the amount of time the respondents had lived in their current permanent residences.

The majority of the respondents in both Services had lived in their current permanent housing for 7 months or longer. This implies adequate time to have settled in and adjusted through differing seasons of the year.

Table G-9  
Career Intentions (Q20)

Intention	Army		Air Force		Total	
	n	%	n	%	n	%
Definitely do not intend to remain in the Service for at least 20 years	86	3.1	64	3.8	150	3.4
Probably will not remain in the Service for at least 20 years	69	2.5	57	3.4	126	2.8
Uncertain	251	9.1	156	9.3	407	9.2
Probably will remain in the Service for at least 20 years	516	18.7	369	22.0	885	19.9
Definitely intend to remain in the Service for at least 20 years	1486	53.8	757	45.1	2243	50.5
Have already served 20 years or more	354	12.8	275	16.4	629	14.2
Total	2762	100.0	1678	100.0	4440	100.0

By pay grade group, in both Services, negativity was most often found in the E-1 to E-3 pay grade group (28.8% Army, 22.5% Air Force). These same groups were also the most uncertain (27 to 30%). The Army E-4 to E-6 group was the next most uncertain (20.6%).

#### Preferences After Completion of the Current Tour

Table G-10 presents the preferences of all respondents including the unaccompanied after completion of their current tour.

Over half of each sample preferred to return to CONUS. Approximately the same percentage of Army (22.6%) and Air Force respondents (24.7%) reported a preference to remain overseas.

By pay grade group, in the Army sample, the E-1 to E-3 respondents more frequently reported a preference for leaving the Service (17.7%) than did other pay grade groups (2 to 9%). Somewhat fewer of both the E-1 to E-3 and E-4 to E-6 respondents preferred to return to CONUS than did other pay grade groups; and they were more often uncertain or had no preference compared to others. In the Air Force sample, the E-7 to E-9 group more frequently reported (13.8%) preferring to leave the Service than did other groups (4 to 9%), which may be a reflection of retirement plans.

Table G-8  
Special Groups

Special Group Identification	Army		Air Force		Total	
	n	%	n	%	n	%
Accompanied female service members	41	1.7	83	5.5	124	3.2
Accompanied single parents	22	1.0	40	3.4	62	1.8
Service members with local national spouses	236	9.9	105	7.1	341	8.8
Service members with nonsponsored dependents	59	2.5	28	1.9	87	2.3
Respondents planning to leave the Service (excluding those with 20 years or more of service)	128	5.8	82	6.4	210	6.0
Unaccompanied service members	240	9.1	77	4.9	317	7.5

#### Prior Foreign Experience (Q17)

A majority of both samples had had prior foreign experience, with more of the Army respondents reporting this (80.4%) than the Air Force (69.6%). In both Services, the E-1 to E-3 respondents were least likely to have been overseas previously (60% Army, 76% Air Force), followed by the E-4 to E-6 and O-1 to O-3 groups (38 to 48%).

#### Time Spent/Remaining in the Current Tour (Q18, Q19)

The large majority of the respondents had been at their current duty station for over one year (68.9% Army, 75.7% Air Force). E-1 to E-3 personnel in both Services were the most likely of the pay grade groups to have been at the duty station for less than one year. Considerable percentages (40 to 65%) in both Services and across pay grade groups had 16 months or longer remaining in their tours, with more of the E-1 to E-3 respondents reporting in this category. More of the O-4 to O-6 than other pay grade group respondents in the Army reported having 6 months or less remaining, while the percentages of short termers in the Air Force were equally distributed across all pay grade groups (with the exception of the E-1 to E-3s).

These data imply that the samples were generally experienced with foreign living and had been in their situations long enough to be somewhat established in their living conditions.

#### Military Career Intentions

Table G-9 presents the data for all respondents on career intention (to remain at least 20 years in the Service).

Both samples were highly career motivated, with 72.5 percent of the Army and 67.1 percent of the Air Force respondents reporting they would probably or definitely make the military a career. Only 5.6 percent of the Army and 7.2 percent of the Air Force samples were negative.



Table G-6

## Median Family Income for Previous Month by Pay Grade Group (Q147)

Pay Grade Group	Army		Air Force		Total	
	n	\$	n	\$	n	\$
E-1 to E-3	85	1,380	196	1,198	281	1,204
E-4 to E-6	281	1,398	344	1,425	625	1,400
E-7 to E-9	384	1,798	331	2,007	715	1,939
W-1 to W-4	455	2,200	--	--	455	2,200
O-1 to O-3	477	2,382	252	2,702	729	2,496
O-4 to O-6	545	3,289	242	3,655	787	3,410

Table G-7

## Median Spouse Income for Previous Month by Pay Grade Group (Q148)

Pay Grade Group	Army		Air Force		Total	
	n	%	n	%	n	%
<u>No Income</u>						
E-1 to E-3	52	68.4	102	58.0	154	61.1
E-4 to E-6	150	60.0	188	57.3	338	58.5
E-7 to E-9	191	53.5	153	48.1	344	51.0
W-1 to W-4	207	48.8	--	--	207	48.8
O-1 to O-3	302	66.2	145	60.4	447	64.2
O-4 to O-6	314	59.1	158	66.4	472	61.4
Total	1216	58.1	746	57.4	1962	56.4
<u>With Income</u>						
E-1 to E-3	24	475	74	399	98	404
E-4 to E-6	100	705	140	598	240	650
E-7 to E-9	166	760	165	800	331	796
W-1 to W-4	217	799	--	--	217	799
O-1 to O-3	154	765	95	878	249	797
O-4 to O-6	217	878	80	745	297	802
Total	878	786	554	701	1432	747

Table G-5  
Spouse Employment Status--Germany/CONUS (Q145-Q146)

Status	Army				Air Force				Total			
	Germany		CONUS		Germany		CONUS		Germany		CONUS	
	n	%	n	%	n	%	n	%	n	%	n	%
<u>Unemployed, not looking for work</u>												
E-1 to E-3	33	36.7	26	40.6	60	28.8	24	22.4	93	31.2	50	29.2
E-4 to E-6	101	34.4	83	32.8	133	36.2	90	27.4	234	35.4	173	29.8
E-7 to E-9	133	32.4	134	34.0	115	32.4	88	28.0	248	32.4	222	31.4
W-1 to W-4	162	33.7	197	43.2	--	--	--	--	162	33.7	197	43.2
O-1 to O-3	239	49.1	224	50.7	126	48.6	77	35.8	365	48.9	301	45.8
O-4 to O-6	286	50.6	256	49.2	148	56.9	92	43.0	434	52.5	348	47.3
Total	954	41.0	920	43.2	582	40.2	371	31.5	1536	40.7	1291	39.0
<u>Unemployed, looking for work</u>												
E-1 to E-3	30	33.3	3	4.7	65	31.3	12	11.2	95	31.9	15	8.8
E-4 to E-6	81	27.6	32	12.6	85	23.2	17	5.2	166	25.1	49	8.4
E-7 to E-9	85	20.7	39	9.9	59	16.6	14	4.5	144	18.8	53	7.5
W-1 to W-4	83	17.3	29	6.4	--	--	--	--	83	17.3	29	6.4
O-1 to O-3	83	17.0	20	4.5	38	14.7	4	1.9	121	16.2	24	3.7
O-4 to O-6	59	10.4	13	2.5	30	11.5	7	3.3	90	10.9	20	2.7
Total	421	18.1	136	6.4	277	19.1	54	4.6	699	18.5	190	5.7
<u>Employed full time (civilian)</u>												
E-1 to E-3	12	13.3	23	35.9	28	13.5	44	41.1	40	13.4	67	39.2
E-4 to E-6	59	20.1	77	30.4	73	19.9	128	39.0	132	20.0	205	35.3
E-7 to E-9	129	31.5	147	37.3	110	31.0	146	46.5	239	31.2	293	41.4
W-1 to W-4	169	35.1	156	34.2	--	--	--	--	169	35.1	156	34.2
O-1 to O-3	80	16.4	131	29.6	41	15.8	71	33.0	121	16.2	202	30.7
O-4 to O-6	114	20.2	142	27.3	41	15.8	65	30.4	155	18.8	208	28.3
Total	563	24.2	676	31.8	293	20.2	454	38.5	856	22.7	1131	34.2
<u>Employed P/T or intermittently (civilian)</u>												
E-1 to E-3	11	12.2	10	15.6	49	23.6	21	19.6	60	20.1	31	18.1
E-4 to E-6	39	13.3	45	17.8	55	15.0	60	18.3	94	14.2	105	18.1
E-7 to E-9	56	13.7	63	16.0	58	16.3	52	16.6	114	14.9	115	16.2
W-1 to W-4	66	13.7	72	15.8	--	--	--	--	66	13.7	72	15.8
O-1 to O-3	81	16.6	56	12.7	41	15.8	42	19.5	122	16.4	98	14.9
O-4 to O-6	98	17.3	102	19.6	39	15.0	48	22.4	137	16.6	150	20.4
Total	351	15.1	348	16.3	242	16.7	223	18.9	593	15.7	571	17.3
<u>In the military</u>												
E-1 to E-3	4	4.4	2	3.1	6	2.9	6	5.6	10	3.4	8	4.7
E-4 to E-6	14	4.8	16	6.3	21	5.7	33	10.1	35	5.3	49	8.4
E-7 to E-9	7	1.7	11	2.8	13	3.7	14	4.5	20	2.6	25	3.5
W-1 to W-4	1	0.2	2	0.4	--	--	--	--	1	0.2	2	0.4
O-1 to O-3	4	0.8	11	2.5	13	5.0	21	9.8	17	2.3	32	4.9
O-4 to O-6	8	1.4	7	1.3	2	0.8	2	0.9	10	1.2	9	1.2
Total	38	1.6	49	2.3	55	3.8	76	6.5	93	2.5	125	3.8

Command Sponsorship of Dependents (Q13). Accompanied respondents with non-sponsored dependents living with them represented only 2.5 percent of the Army sample and 1.9 percent of the Air Force.

### Spouse Employment

Table G-5 shows spouse employment status for the accompanied respondents at the current location and in CONUS prior to moving overseas.

The differences in spouse employment status between CONUS and Germany were relatively minor in both Services. Approximately the same number of spouses were unemployed and not looking for work in both situations. The numbers of spouses unemployed and looking for work in Germany were about 12 and 14 percentage points higher than in CONUS for Army and Air Force spouses respectively.

Officers' spouses were more often reported as unemployed and not looking for work (50 to 51%) than all other pay grade groups (32 to 37%). Spouses of E-1 to E-6 respondents were more often reported unemployed and looking for work (28 to 33%) than others (10 to 21%). Spouses of E-7 to E-9 and W-1 to W-4 respondents were more often reported working in full-time civilian positions (32 to 35%) than other pay grade group spouses (13 to 20%).

### Family/Spouse Income Q147, Q148)

Table G-6 shows the median family income for the previous month by pay grade group. Total family income was generally a reflection of pay grade level. However, the reader is cautioned that all pay grades were not equally represented in the groups. The median incomes reported are affected by this unequal representation.

Table G-7 shows the percentages of spouses who were reported as having no income, as well as the median incomes by pay grade group of those spouses with income during the previous month.

Approximately one-half (48.8%) to two-thirds (64.2%) of the spouses were reported to have no income. Among those with income, the E-1 to E-3 spouses in both Services showed the lowest income levels for the previous month.

### Special Groups

Table G-8 presents the number and percentage of respondents falling into the special groups categories.

Differences between respondents in these special groups and their opposites (e.g., female service members versus male service members) are presented with special groups (p. 152).

### Service History

Service history consists of three time factors: prior time spent in foreign locations, time at the current duty station, and time remaining in the current tour of duty.

children (46.9%) compared to the E-4 to E-6 and O-1 to O-3 respondents (18.3 to 20.3%) and the senior enlisted and officers (9.6 to 11.0%).

Household Size (Q14)/Age of Children. For the accompanied respondents only, the average number of live-in dependents was 2.9 percent in the Army and 2.5 percent in the Air Force, with the greatest frequency (modal group) of dependents being three.

Table G-3 shows the percent of accompanied service members who had one or more children in the various age groups. Since the respondents frequently had children in more than one age group, the percentages will not add to 100 percent.

Table G-3  
Ages of Children (Q8-Q11)

Age Group	Army (n = 2,321) %	Air Force (n = 1,465) %
Q8: Children under 2 years of age	23.6	22.3
Q9: Children 2 to 5 years of age	37.9	27.6
Q10: Children 6 to 12 years of age	55.3	43.8
Q11: Children 13 to 18 years of age	33.7	29.8

Table G-4 shows the number of children in each age group.

Table G-4  
Number of Children in Each Age Group

Age Group	Army		Air Force		Total	
	n	%	n	%	n	%
Q8: Children under 2	599	12.7	350	14.8	949	13.4
Q9: Children 2 to 5	1082	23.0	490	20.8	1570	22.2
Q10: Children 6 to 12	1879	40.0	920	39.0	2799	39.7
Q11: Children 13 to 18	1141	24.3	597	25.3	1738	24.6
Total	4701	100.0	2357	99.9	7056	99.9

The largest percentage of service members had children in the 6 to 12 year age group in both Services, with somewhat more children found in the Army sample than the Air Force. Children 2 to 5 years old were also more often found among Army respondents than Air Force. Infants were represented in nearly one-quarter of the families.

In the Army sample, the officers were represented somewhat more than the enlisted personnel, whereas in the Air Force sample, the officers were underrepresented. The reader is cautioned again that the percentages in Table G-1 are not necessarily an accurate reflection of the pay grade groups in the population in Germany.

Pay grades were grouped for ease of analysis, presentation, and interpretation. The distributions of individual pay grades within each group varied somewhat by Service. In both Services, the E-1 to E-3 groups consisted mainly of E-3s. In the Army, the E-4 to E-6 pay grades were nearly equally represented in the group, while in the Air Force there were somewhat more E-5s than E-4s and E-6s. In both Services, the E-7 to E-9 groups were mostly E-7s. In the Army sample, warrant officers were equally distributed across the W-1 to W-2 and W-3 to W-4 pay grades. In both Services commissioned officers in the O-1 to O-3 groups were largely O-3s and in the O-4 to O-6 groups, the large majority were O-4s and O-5s.

#### Sex, Marital Status, and Spouse Nationality (Q3-Q6)

Both Service samples were overwhelmingly male (97.6% in the Army and 94.2% in the Air Force). Reflecting how the sample was selected, 96.3 percent in the Army and 94.5 percent of the Air Force respondents were currently married. Approximately 5.3 percent of the Army and 9.4 percent of the Air Force personnel had changed their marital status since arriving at the current duty station (i.e., had married or divorced). Relatively large percentages of the respondents in both Services were married to local or other foreign nationals (18.4% Army, 17.5% Air Force).

#### Household Composition and Dependents

Table G-2 shows the composition of households by Service, including the unaccompanied. The large majority of the households in each Service included dependent children with more in the Army sample than in the Air Force. Single parent households, those including relatives, and dual military career households were uncommon.

Table G-2  
Household Composition (Q7)

Household Composition	Responses (%)	
	Army (n = 2,389)	Air Force (n = 1,510)
Households without children	5.9	19.4
Households with children	94.1	80.6
Single parent households	1.0	2.7
Households with relatives as dependents	3.2	1.9
Dual career households	1.0	3.0

In the Army sample the E-1 to E-6 respondents were more likely to have no dependent children (15 to 17%) than were other pay grade groups (1.2 to 9.0%). In the Air Force sample, a considerably higher percentage of the E-1 to E-3 respondents had no

## RESULTS—GERMANY (ARMY, AIR FORCE)

### PROFILE OF SAMPLES

Two Services were represented in the sample from Germany, the Army and Air Force. The return rate for the Germany sample (see Table 3) show that the E-1 to E-3 personnel in both Services and the E-4 to E-6 personnel in the Army were below the acceptable level of 50 percent. Similarly, because of the mailing and distribution problem for Air Force personnel (discussed on p. 8), the officer pay grade groups were also not adequately represented in the sample. For all other pay grade groups, the results may be considered to be moderately to highly representative of the respective pay grade populations in Germany.

The main focus of the study was on service members accompanied by their dependents. Special analyses were also conducted for those service members who had dependents but were unaccompanied. In Germany, the unaccompanied sample was relatively small. Basic demographic data for the unaccompanied respondents are included in this first section only. All other information gathered on the unaccompanied respondents is presented with special groups (p. 152).

#### Demographic Characteristics

This section presents the demographic characteristics of the two Service samples, including the unaccompanied (where applicable).

#### Pay Grade

Table G-1<sup>a</sup> shows the distribution of pay grade groups by Service.

Table G-1  
Pay Grade Group by Service (Q1-Q2)

Pay Grade Group	Army		Air Force		Total	
	n	%	n	%	n	%
E-1 to E-3	163	5.9	242	14.4	405	9.1
E-4 to E-6	407	14.7	443	26.4	850	19.1
E-7 to E-9	531	19.2	412	24.5	943	21.2
W-1 to W-4	538	19.4	--	--	538	12.1
O-1 to O-3	519	18.7	292	17.4	811	18.2
O-4 to O-6	612	22.1	292	17.4	904	20.3
Total	2770	100.0	1681	100.1	4451	100.0

<sup>a</sup>Prefix of table numbers identifies survey results by country: G = Germany.

9. The assignment policy proposals favored by a majority of the respondents were those that would: (a) extend eligibility for government housing to those Service families currently ineligible, (b) construct additional housing for E-1 to E-3 and E-4 families (with less than 2 years of service), and (c) assign government housing by bedroom requirements. Among the choice-allowance proposals, the maintenance allowance, utility allowance, and the proposal allowing retention of some BAQ in exchange for living in a unit with fewer bedrooms were all favored by a majority of the respondents.

## CONCLUSIONS

1. Permanent housing was among the most serious problems reported by the respondents in both Services. Family housing was overwhelmingly selected in the Air Force sample and among the top three selected in the Navy sample as needing improvement.

2. Other commonly reported serious problems were living expenses (including utilities) and initial housing expenses (e.g., deposits, fixtures, etc.) in both Services. Navy respondents also reported serious problems with working conditions and spouse employment, while Air Force respondents reported temporary lodging facilities and vehicles (e.g., shipping, insurance, inspections, etc.). In addition to the selection of family housing as needing improvement in both Services, Navy respondents also selected commissaries and exchanges, while Air Force respondents selected parking and temporary lodging facilities.

3. The type of housing occupied (e.g., government-owned, government-leased, economy, and "other") varied by Service. Government-owned housing was not as available to Navy respondents (11.2%) as Air Force respondents (31.3%). Approximately equal percentages of Navy and Air Force respondents lived in economy housing (50.6 and 47.2%) and in government-leased housing (20.2 and 19.4% respectively), while Navy respondents were more likely to live in "other" (e.g., R.A.F.) housing (18.1%) than the Air Force personnel (2.0%).

4. Government-owned housing was preferred by more respondents than currently occupied this type of housing in both Services and across all pay grade groups. This preference was considerably stronger among Air Force respondents than among Navy respondents.

5. Temporary lodgings were a problem for one-third to one-half of the service members across Services. Dissatisfaction was highest with the size of the quarters as well as with laundry, kitchen, eating, and cooking facilities in the temporary lodgings.

6. Service members were generally satisfied with their permanent residences. However, the type of residence occupied influenced their satisfaction with particular aspects of the residences. Occupants of government-leased or economy housing were generally more dissatisfied with more aspects of their housing than were those in government-owned housing. Of particular concern were household systems (e.g., heating, laundry facilities, etc.), costs and convenience to installation facilities.

7. Satisfaction with the size of the residence was the best predictor of overall satisfaction with the residence for both temporary lodgings and permanent housing. Greater satisfaction with size was associated with greater overall satisfaction, and greater dissatisfaction with size was associated with greater overall dissatisfaction with the comfort and adequacy of the residence.

8. Overall satisfaction with the comfort and adequacy of the permanent residence was the most important predictor of perceived effects of living conditions on job performance. Greater satisfaction was associated with perceptions of positive on job performance and greater dissatisfaction was associated with perceptions of negative effects on job performance.



selected family housing as an area most needing improvement. Beyond that consensus, however, the Air Force respondents reported problems with vehicles and temporary lodging facilities, and selected parking and temporary lodging facilities as areas needing improvement the most. Temporary lodging facilities were discussed earlier. The following comments illustrate the concern of Air Force respondents with vehicles and parking facilities:

1. Basic government owned housing should be closer to base than 26 miles. It is a 45 minute drive one-way. Also, the roads I use to travel are back roads no matter which way I go. That makes the ride to work hard on the car. This makes the cost of auto repair higher. (Air Force E-4)
2. Parking at this location is terrible. During peak hours parking is next to impossible to find. The base finds money to build new facilities, however, parking has not been relieved. (Air Force E-6)

In the Navy sample, the additional serious problems reported were working conditions and spouse employment. In the areas perceived as needing improvement, in addition to family housing, Navy personnel chose commissaries and exchanges. Selection of commissaries and exchanges may, in part, be tied to the exchange rate in the United Kingdom at the time of the survey. Below are illustrations of what respondents may mean when they report that working conditions and spouse employment are serious problems:

1. HQ working facilities were extremely overcrowded for size of staff and support personnel. Maintaining this HQ in downtown London seems to be more politically advantageous rather than what common sense would dictate we do. (Navy E-7)
2. The support facility hires many Scottish. All other menial jobs they allow Americans to apply (for). With so many American women looking for jobs, they should open up the job availability to U.S. spouses. It may be required to hire so many Scottish, but if not they should fire them and hire dependents. The Scottish have such a strong sentiment against Americans it wouldn't make a difference. It may just show how much support we do give to the community. (Navy E-7)

The questionnaire did not pursue the question of anti-American sentiment. However, several respondents added comments on the questionnaire on this topic. The comments were general for the most part; that is, they simply reported the respondents' perceptions of anti-American feelings among the British. Exceptions to this, however, came from respondents assigned at RAF Greenham Common, where the Americans felt abused and inconvenienced by the British who were protesting deployment of the MX missiles.

Data from the special groups in the United Kingdom samples were generally too small for analysis or discussion of trends. The largest special group in both Services consisted of service members married to local nationals. Of some interest, but of no surprise, were the findings that service members married to local nationals preferred to extend in the present location or to do a second tour in the United Kingdom, and that they use economy (versus government) facilities more than did those with U.S. born or other foreign spouses.

the proposals for overseas locations and (2) all pay grade groups in the current study showed greater preference for government-owned housing.

Finally, with respect to the perceived effects of living conditions, the lower enlisted pay grades tended to be more negative. That is, they more often than did the senior enlisted and officers reported that their living conditions negatively affected their job performance, career intentions, and willingness to choose the present assignment again. In the analysis predicting willingness to choose the present assignment again, pay grade was also a contributing influence to the prediction.

The differential experiences of the junior enlisted, combined with their lower salaries, greater spouse unemployment, and less experience with relocations (especially to foreign countries), may place them in situations of somewhat higher stress than their more senior and seasoned counterparts. In interviews with numerous service personnel overseas, officers and senior enlisted personnel frequently stated that they were "doing alright." But they were very concerned about the men and women in the lower pay grades who worked for them. Several mentioned that they "don't know how they do it." The following comments illustrate concern for the burdens placed on more junior personnel, burdens which impact considerably less upon more senior service members. Comments like these were typical, both in the write-ins and in interviews with service personnel overseas:

1. I think one area of concern to everyone is moving expenses, both out of the old house and into the new. Whether it is economy or government it still costs people around \$1500.00 to \$2500.00 without any reimbursement from the government. Shipping someone overseas would be a lot better if the financial burden was born (sic) by the service and not the service member. My particular move cost me in the neighborhood of \$1850.00. As an officer it wasn't extremely difficult, but it definitely impacts the force, especially the junior grades. (Air Force O-3)
2. We drive 60 miles each way to the commissary, exchange, and hospital. In all honesty, I'm not complaining, it's a lovely drive. However, it's a real hardship for those without cars, whose spouse works, families with small children, etc. (Navy O-5)

In summary, the analysis began with two samples (Navy and Air Force) that were nearly identical with respect to the demographic characteristics they had taken to their new assignments in the United Kingdom. To a large extent, they rarely differed in their subsequent experiences and situations and the attitudes they formed as a result of these experiences. The few differences that were noted seem to be mostly a function of their differing locations within the country. For personnel located in more rural or remote areas, both temporary and permanent housing were more dispersed and fewer suitable rentals were available. Apparently economy facilities of other kinds (e.g., for food and nonfood shopping) were also less available. This would account for the considerably higher usage of government facilities (versus economy facilities) among the Air Force respondents compared to the Navy, since more Air Force respondents in the survey sample were located in rural or remote areas than were Navy respondents.

The most notable differences between the service samples were in their reporting of problems and areas needing improvement. Respondents in both Services agreed that living expenses, permanent housing, and initial housing costs presented problems and both

Table G-12

## Current and Preferred Housing Types by Pay Grade Group (Q44-Q45)

Service/Pay Grade Group	n	Responses (%)					
		Government-owned		Government-leased		Economy/Other	
		Current	Preferred	Current	Preferred	Current	Preferred
<u>Army</u>							
E-1 to E-3	88	27.0	43.7	6.7	11.5	66.3	44.8
E-4 to E-6	283	45.9	49.1	14.8	15.9	39.2	35.0
E-7 to E-9	406	69.4	55.9	12.3	12.3	18.3	31.6
W-1 to W-4	481	66.3	54.3	15.8	12.1	17.8	33.7
O-1 to O-3	483	63.9	49.2	12.6	12.7	23.5	38.2
O-4 to O-6	567	76.4	63.5	10.0	11.3	13.6	25.2
Total	2308	64.8	54.7	12.6	12.5	22.5	32.8
<u>Air Force</u>							
E-1 to E-3	199	2.0	28.3	2.5	10.1	95.5	61.6
E-4 to E-6	383	41.1	37.7	13.5	9.4	45.4	52.8
E-7 to E-9	354	54.0	41.0	13.3	10.5	32.8	48.6
O-1 to O-3	255	33.7	24.7	7.1	8.2	59.2	67.1
O-4 to O-6	267	46.1	31.5	5.2	4.5	48.7	64.0
Total	1458	38.5	33.8	9.3	8.7	52.2	57.5

### Housing Style (Q44, Q46)

Table G-13 shows the distribution of housing styles by Service and pay grade group.

Large majorities of all respondents in both Services were living in apartments at the time of the survey. In Germany, most of the government-owned housing is stairwell. A stairwell unit is a four-story apartment building with two internal stairwells, each serving eight apartments. Somewhat more of the Army respondents than the Air Force were living in apartments, with greater diversity of style among the Air Force respondents.

By pay grade group, commissioned officers in both Services more often lived in single family detached or duplex units than did those in all other pay grades.

In both Services, the vast majority of government-owned housing units were walk-up stairwell apartments (81.5% Army and 91.8% Air Force). Most of the government-leased housing units were either town/rowhouses or apartments (82.5% Army and 78.2% Air Force). Economy housing in the Army sample was 17.7 percent single family units, 15.8 percent duplexes, 14.1 percent town/rowhouses, and 52.3 percent apartments. Economy housing in the Air Force sample was 22.2 percent single family, 20.6 percent duplexes, 10.1 percent town/rowhouses, and 47.0 percent apartments. Apartment houses with elevators were most commonly found among government-leased units and were rare in either government-owned or economy housing.

### Commuting Distances to Installation (Q52)/Community Type (Q54)

The average commuting distances from the residence to the installation among Army respondents was 5.3 miles with a range from 1 to 40 miles. Reflecting the large percentage of Army respondents living in government-owned housing, the modal (most frequent) distance was 2.5 miles. In the Air Force sample, the average commuting distance from the residence to the installation was 6.3 miles, also with a range from 1 to 40 miles. The most frequent distance reported was 7.3 miles, again reflecting the larger percentage of respondents living in economy housing.

Among respondents living off the installation (i.e., in government-leased or economy housing), a majority in each sample characterized their communities as having few or no other Americans (60.9% Army, 56.2% Air Force). Relatively few (10.5 to 15.9%) described their communities as being mostly American with 23.2 percent in the Army and 33.3 percent in the Air Force reporting a mix of Americans and local nationals.

### Sharing Living Expenses (Q51)/Out-of-pocket Expenses for Housing (Q50)

Very few respondents in either Service (2.2% in the Army and 3.3% in the Air Force) reported sharing living expenses with persons other than their dependents.

Table G-14 shows the percentages by pay grade group reporting monthly out-of-pocket expenses for housing (including rent, utilities, and initial costs) beyond BAQ, Rent Plus, or SHA. The reader is cautioned that the percentages reporting excessively high out-of-pocket expenses (\$600+) per month probably represent error in the data due to some respondents incorrect use of the answer form. Alternatively, some respondents may have included in their total initial housing expenses (i.e., they did not read the question carefully).

Table G-13

## Housing Styles by Service and Pay Grade Group (Q46)

Housing Style	Responses (%)				
	E-1 to E-3	E-4 to E-6	E-7 to E-9	W-1 to W-4	O-1 to O-3
	(n = 88)	(n = 285)	(n = 406)	(n = 483)	(n = 486)
<u>Army</u>					
Single family	3.4	6.0	3.7	4.3	4.3
Duplex	8.0	6.3	5.7	7.0	8.0
Town/rowhouse	4.5	6.7	9.1	9.5	11.5
Apartment (walk-up)	73.9	68.1	73.6	71.8	70.8
Apartment (elevator)	10.2	13.0	7.9	7.2	5.3
<u>Air Force</u>	(n = 199)	(n = 385)	(n = 257)	--	(n = 256)
Single family	7.5	7.3	8.7	--	18.8
Duplex	16.1	10.1	9.5	--	18.8
Town/rowhouse	7.0	6.5	8.1	--	10.5
Apartment (walk-up)	63.8	71.2	71.4	--	50.0
Apartment (elevator)	5.5	4.9	2.2	--	2.0
					(n = 572)
					(n = 2320)
					7.3
					11.1
					8.8
					66.5
					6.3
					(n = 1364)
					12.5
					13.6
					8.7
					62.2
					3.0

Table G-14

## Out-of-pocket Expenses for Housing Per Month (Q50)

Out-of-pocket Expenses per Month	Responses (%)						Overall Total
	E-1 to E-3	E-4 to E-6	E-7 to E-9	W-1 to W-4	O-1 to O-3	O-4 to O-6	
<u>Army</u>							
None	42.7	57.6	68.9	75.6	74.5	76.8	70.8
\$10 - 50	8.3	7.8	3.5	2.0	3.6	2.1	3.6
60 - 100	11.5	7.8	7.5	4.1	4.6	3.8	5.5
110 - 150	7.3	2.6	3.1	3.0	1.0	1.2	2.3
160 - 200	7.3	2.9	1.9	1.0	2.2	1.6	2.0
210 - 250	0.0	1.6	0.7	1.6	0.8	0.9	1.0
260 - 300	1.0	1.0	0.2	1.2	0.8	0.2	0.7
310 - 400	2.1	1.6	1.4	0.0	0.6	0.3	0.8
410 - 600	3.1	2.3	1.2	0.4	0.4	0.7	1.0
610 - 1000	14.6	14.6	10.8	11.0	11.2	12.1	11.9
1010 - 1500	0.0	0.0	0.2	0.0	0.2	0.2	0.1
1500+	2.0	0.3	0.5	0.0	0.0	0.2	0.2
<u>Air Force</u>							
None	31.5	53.8	65.5	--	49.8	61.5	54.1
\$10 - 50	23.9	11.3	7.9	--	12.7	7.0	11.7
60 - 100	18.8	11.0	5.8	--	15.4	12.6	11.9
110 - 150	4.7	2.5	4.7	--	3.0	4.1	3.7
160 - 200	3.3	3.8	1.4	--	3.7	3.7	3.1
210 - 250	0.9	2.0	0.5	--	1.1	1.5	1.3
260 - 300	3.3	2.0	0.5	--	1.7	1.5	1.5
310 - 400	1.4	0.5	0.8	--	0.4	0.4	0.7
410 - 600	0.9	0.8	2.2	--	1.1	0.4	1.1
610 - 1000	10.8	10.5	10.4	--	10.9	5.9	9.8
1010 - 1500	0.0	1.3	0.3	--	0.4	0.4	0.5
1500+	0.5	0.8	0.0	--	0.8	1.2	0.6

### Army

With 77.3 percent of the Army sample living in government-owned or government-leased housing, a large majority (70.8%) of respondents reported no monthly out-of-pocket expenses for housing. However, the enlisted respondents (especially the E-1 to E-3 service members) were much more likely than were officers to report monthly expenses beyond their BAQ, etc. Of those living in economy housing, 25.9 percent reported no out-of-pocket expenses.

### Air Force

With less than one-half of the Air Force sample living in government-owned or government-leased housing, just over half (54.1%) reported no monthly out-of-pocket expenses for housing. The senior enlisted and senior officers were more likely to report this (66 and 62% respectively) than the lower graded enlisted and officer respondents (32 and 54%). Among residents of economy housing, 30.9 percent reported no out-of-pocket expenses beyond their allowances.

## **PROCESS OF OBTAINING HOUSING**

### Introduction

Service members and their families arriving at their foreign post, base, or duty station normally spend some time in temporary lodgings prior to being assigned government housing or to renting in the economy. These temporary lodgings may be government quarters on or near the installation or commercial lodgings (hotels). The length of stay in temporary lodgings varies according to the housing market and availability of government housing. However, personnel are encouraged to find housing as soon as possible. When families stay in temporary lodging, they receive TLA (Temporary Living Allowance).

In general, the number of respondents who answered the items dealing with temporary lodgings was somewhat lower than most of the other sections of the questionnaire. This may be indicative of fewer service members having experience in temporary lodgings, but more than likely reflects a reluctance to answer the questions, especially among those who had been at their current duty stations (and, therefore, in permanent housing) for long periods of time.

### Temporary Housing (Q43)

Only small percentages of the samples (3.6% Army, 3.8% Air Force) were living in temporary lodgings at the time of the survey. Most of the respondents in the samples had been in their permanent housing for some period of time when they answered the questionnaire and their responses are based on recall of their experiences.

### Time Unaccompanied Before Arrival of Dependents

As shown in Table G-15, the majority of respondents in the Air Force sample traveled concurrently with their dependents, compared to only 39.0 percent of the Army respondents. Nearly two-thirds of the Army sample and over one-third of the Air Force spent some period of time unaccompanied before their dependents arrived. Additionally, a larger percentage of the Army respondents waited longer periods of time for the arrival of their dependents.

Table G-15

## Time Unaccompanied Before Arrival of Dependents (Q104)

Weeks Unaccompanied	Army		Air Force		Total	
	n	%	n	%	n	%
None	649	39.0	729	63.8	1378	49.1
1 to 4 weeks	162	9.7	92	8.1	254	9.0
5 to 8 weeks	323	19.4	144	12.6	467	16.6
9 to 12 weeks	233	14.0	75	6.6	308	11.0
13 weeks or longer	298	17.9	102	8.9	400	14.2
Total	1665	100.0	1142	100.0	2807	99.9

In both Services, considerably fewer (10.5% Army, 36.6% Air Force) of the E-1 to E-3 service members had concurrent travel with their dependents compared to the other pay grade groups (30 to 53% Army and 63 to 69% Air Force).

Actual and Preferred Types of Temporary Lodgings

Table G-16 shows the types of temporary lodgings that were occupied by the respondents upon arrival at the duty station, their preferences with respect to temporary lodgings, and the disparity between the two. Temporary government-leased lodgings have been combined with government-owned lodgings in Table G-16 since only 3.6 percent occupied that type in the Army sample. Similarly, only 13.1 percent preferred temporary government-leased lodgings. In the Air Force sample, 2.1 percent occupied government-leased lodgings and 7.1 percent preferred them.

The majority of both samples occupied and preferred to occupy government temporary lodgings. Fewer of the Army than Air Force respondents lived in their preferred type of temporary lodgings. Of all the pay grade groups, the O-4 to O-6 respondents most often occupied their preferred type.

Days in Temporary Lodgings (Q107)/Time Drawing TLA (Q108)

Among those reporting that they had lived in temporary lodging facilities, the time spent was 60 days or less for a majority in each sample (74.3% Army, 82.1% Air Force). The average number of days (54 days) for the Army was larger than for the Air Force (43 days). However, for both samples, one-half of the respondents had spent 30 days or less. Similarly, the time drawing TLA was 60 days or less for 88.6 percent of the Army and 87.4 percent of the Air Force. The average number of days on TLA was 28 in the Army sample and 31 in the Air Force sample.

By pay grade, the Army E-1 to E-3 respondents tended to have spent longer periods of time in temporary lodging facilities than other pay grade groups. In both Services, the O-4 to O-6 personnel more often than other pay grade groups spent 30 days or less.



Table G-16

## Type of Temporary Lodgings Occupied and Preferred (Q105-Q106)

Pay Grade Group	Responses (%)				Disparity <sup>a</sup>
	Government-owned/leased		Economy		
	Occupied	Preferred	Occupied	Preferred	
<u>Army</u>	(n = 986)	(n = 1235)	(n = 640)	(n = 401)	
E-1 to E-3	61.1	69.1	38.9	30.9	8.0
E-4 to E-6	66.7	77.8	33.3	22.2	11.1
E-7 to E-9	55.0	75.3	45.0	24.7	20.3
W-1 to W-4	50.9	73.4	49.1	26.6	22.5
O-1 to O-3	60.5	73.3	39.5	26.7	12.8
O-4 to O-6	70.3	79.0	29.7	21.0	8.7
Total	60.6	75.5	39.4	24.5	14.9
<u>Air Force</u>	(n = 763)	(n = 860)	(n = 369)	(n = 276)	
E-1 to E-3	73.9	64.9	26.1	35.1	9.0
E-4 to E-6	66.1	77.0	33.9	23.0	10.9
E-7 to E-9	65.0	74.6	35.0	25.4	9.6
O-1 to O-3	62.7	73.0	37.3	27.0	10.3
O-4 to O-6	72.9	76.7	27.1	23.3	3.8
Total	67.4	75.7	32.6	24.3	8.3

<sup>a</sup>The disparity here refers to both sets of data.

### Opinions About Temporary Lodgings

#### Satisfaction With Aspects of Temporary Lodgings

Respondents were asked their satisfaction with various aspects of their most recent (or current) temporary lodgings. For both samples, these lodgings were largely government-owned or government-leased (65.4% Army, 60.3% Air Force) with just over one-third in each Service having (34.7% Army and 39.7% Air Force) last been in economy lodgings.

Features Most Often Reported as Not Available. Three types of typical housing features were frequently reported not available in the temporary lodgings. The percentages reporting nonavailability are shown in Table G-17, by Service and lodging type.

Temporary lodgings in the economy much more often than government lodgings did not have these features that would typically be found in permanent housing. The Air Force government quarters, however, were frequently reported as not having kitchen, eating, and cooking facilities.

Table G-17

Features Most Often Reported as Not Available (Q114-Q115, Q117)

Feature	Responses (%)			
	Army		Air Force	
	Government	Economy	Government	Economy
Q114: Kitchen, eating, and cooking facilities	19.1	35.6	27.2	35.0
Q115: Laundry facilities	11.1	47.6	4.2	47.6
Q117: Play space for children	13.7	34.1	16.6	32.6

**Satisfaction Levels.** Respondents were asked their satisfaction level with 10 aspects of their temporary lodgings, as well as with the overall comfort and adequacy of that lodging. In Table G-18, the very- and somewhat-satisfied categories are combined, and the neither dissatisfied nor satisfied responses are not shown. The data presented were only for those respondents who reported their satisfaction level; that is, for whom the service was "available."

There was little difference in overall satisfaction level as a function of the type of temporary lodgings in either Service.

1. **Army.** In the Army sample, dissatisfaction was high with kitchen, eating, and cooking facilities; laundry facilities; and with the size of the quarters, regardless of the type of lodgings. Occupants of temporary government facilities were also dissatisfied with privacy. Those in economy facilities were dissatisfied with play space for children.

Of those who had occupied government quarters, the E-4 to E-6 respondents generally expressed more dissatisfaction than warrant or commissioned officers. In particular, they were more dissatisfied with kitchen, eating, cooking, and laundry facilities; play space for children; and the overall comfort and adequacy of the quarters. The O-4 to O-6 personnel were more dissatisfied than were the warrant officers with convenience of the lodgings to the installation. Among those in economy lodgings, the E-4 to E-6 respondents expressed greater dissatisfaction than did commissioned officers with kitchen, eating, and cooking facilities. On the other hand, O-1 to O-3 respondents were more dissatisfied than E-4 to E-6 respondents with the cost of temporary lodgings.

2. **Air Force.** In the Air Force sample, dissatisfaction was also high with kitchen, eating, and cooking facilities; laundry facilities; size of the quarter; and play space for children in both lodging types. Those in government lodgings were also dissatisfied with privacy.

Of those who lived in government lodgings, the O-4 to O-6 respondents were more dissatisfied than the E-1 to E-6 respondents with security, and more dissatisfied than the E-4 to E-9 and O-1 to O-3 respondents with convenience of the lodgings to government facilities. Among those in economy lodgings, the O-1 to O-3 respondents were more dissatisfied than the E-4 to E-6s with cleanliness of the lodgings.

Table G-18

## Satisfaction with Aspects of Temporary Lodgings (Q112-Q122)

Aspect	Responses (%)					
	Government-owned/leased		Economy		Total	
	Dissat.	Sat.	Dissat.	Sat.	Dissat.	Sat.
<b>Army</b>						
Q112: Personal safety/security	28.3	48.3	19.8	59.9	26.5	52.3
Q113: Privacy	55.7	34.5	38.7	48.7	49.8	39.5
Q114: Kitchen, eating, cooking facilities	59.4	28.4	53.1	37.3	58.1	30.7
Q115: Laundry facilities	58.9	27.1	60.9	27.7	59.3	27.2
Q116: Cleanliness	37.4	47.4	18.9	69.0	31.2	54.9
Q117: Play space for children	47.4	37.8	54.3	32.7	49.7	36.1
Q118: Size of quarters	53.4	34.6	61.2	26.9	56.1	31.8
Q119: Convenience of lodgings to the installation	22.8	66.6	43.3	43.5	30.0	58.4
Q120: Convenience of lodgings to government facilities	21.1	68.1	44.6	41.7	29.2	58.9
Q121: Overall comfort and adequacy	49.2	34.7	42.6	39.4	47.1	36.1
Q122: Cost	25.3	52.5	41.3	37.3	31.8	46.4
<b>Air Force</b>						
Q112: Personal safety/security	20.1	60.6	18.9	56.3	19.7	58.8
Q113: Privacy	52.6	34.9	42.3	40.2	48.6	36.9
Q114: Kitchen, eating, cooking facilities	58.7	29.0	47.2	38.1	54.8	32.1
Q115: Laundry facilities	49.7	35.8	55.8	33.2	51.2	35.1
Q116: Cleanliness	27.5	56.7	15.3	69.1	22.7	61.7
Q117: Play space for children	63.0	24.9	50.2	34.6	58.0	28.6
Q118: Size of quarters	52.5	31.9	58.6	30.1	54.7	31.3
Q119: Convenience of lodgings to the installation	12.7	78.4	40.4	46.4	23.6	65.8
Q120: Convenience of lodgings to government facilities	16.7	73.9	41.4	45.3	26.4	62.6
Q121: Overall comfort and adequacy	41.6	43.3	43.4	38.8	42.2	41.3
Q122: Cost	16.5	64.8	40.8	36.7	26.5	53.1

Grouping the Satisfaction Items. A factor analysis to develop meaningful groups of items was applied to the 11 satisfaction items. For both Services, the results showed three groups of items (factors) that accounted for the interrelationships among them. The first group included very specific aspects of the lodgings: kitchen, eating, cooking, and laundry facilities and play space for children, as well as satisfaction with overall comfort and adequacy. This may be interpreted as a general feeling of satisfaction or dissatisfaction that relates to more concrete aspects of the residence. The second group included convenience of the residence to the duty station and to support facilities, as well as cost. The third group represented satisfaction with more abstract or general aspects of the residence, including safety, privacy, and cleanliness, as well as overall comfort and adequacy. Because of the way the items clustered, the three factors may be interpreted as the major components of satisfaction or dissatisfaction with the temporary lodgings.

Predicting Overall Satisfaction. A second statistical method, regression analysis, was used to determine which item(s) in the questionnaire would best predict the respondents' overall satisfaction with the comfort and adequacy of their temporary lodgings. In addition to the 10 individual satisfaction items, selected demographic characteristics were also used in the analysis (i.e., with or without children, number of live-in dependents, pay grade group, type of temporary lodgings, time in temporary lodgings, and the perceived effects of the temporary lodging experience).

The reader is cautioned to remember that multiple regression analysis uses only the respondents who have answered all of the items included in the analysis. In the results that follow, the Army findings are based on 1,144 cases and the Air Force findings are based on 908 cases. These samples are somewhat reduced from the total sample in each service (2,769 cases in the Army and 1,680 cases in the Air Force).

In the Army sample, the results showed that satisfaction with the size of the temporary quarters was the most powerful predictor of overall satisfaction ( $R = .71$ , out of a possible 1.00). Other items that contributed to the prediction, in descending order of importance, were satisfaction with cleanliness, privacy, convenience of the lodging to government facilities, and kitchen, eating and cooking facilities ( $R = .82$ ). Size was by far the most important component of overall satisfaction.

In the Air Force sample, satisfaction with size was again the most powerful predictor of overall satisfaction ( $R = .69$ , out of a possible 1.00). The additional items that contributed to the prediction, in descending order of importance, were satisfaction with safety, security, cleanliness, cost, privacy, and convenience to government facilities ( $R = .79$ ). Again, satisfaction with the size of the quarters was the single best predictor of satisfaction with overall comfort and adequacy of the temporary lodgings.

#### Effects of the Temporary Lodging Experience

Table G-19 shows how the respondents reported the effects of their temporary housing experiences on their permanent housing choices and attitudes toward living in a foreign location by pay grade group.

Table G-19 shows that the temporary lodging experience was perceived to have more effects (both positive and negative) on choice of permanent housing than on attitude toward living overseas. The Army sample perceived somewhat less negative effects on the choice of permanent housing than did the Air Force sample.

Table G-19

## Effects of the Temporary Lodging Experience

Service/Pay Grade	n	Responses (%)		
		On Permanent Housing Choice (Q110)		
		Less than Satisfactory	No Effect	Satisfactory Choice
<u>Army</u>				
E-1 to E-3	49	26.5	51.0	22.4
E-4 to E-6	155	28.4	43.9	27.7
E-7 to E-9	267	31.5	41.9	26.6
W-1 to W-4	374	30.5	49.7	19.8
O-1 to O-3	339	21.2	60.5	18.3
O-4 to O-6	430	14.0	66.7	19.3
Total	1614	24.0	54.7	21.3
<u>Air Force</u>				
E-1 to E-3	128	37.5	41.4	21.1
E-4 to E-6	269	34.9	37.5	27.5
E-7 to E-9	285	34.7	43.5	21.8
O-1 to O-3	216	31.9	55.6	12.5
O-4 to O-6	221	25.3	62.4	12.2
Total	1119	32.7	47.9	19.4
<u>Total</u>				
E-1 to E-3	177	34.5	44.1	21.5
E-4 to E-6	424	32.5	39.9	27.7
E-7 to E-9	552	33.2	42.8	24.1
W-1 to W-4	374	30.5	49.7	19.8
O-1 to O-3	555	25.4	58.6	16.0
O-4 to O-6	652	17.8	65.3	16.9
Total	2734	27.5	51.9	20.5
On the Respondent's Attitude (Q111)				
		Worsened	No Effect	Improved
<u>Army</u>				
E-1 to E-3	51	25.5	66.7	7.8
E-4 to E-6	55	21.9	65.8	12.3
E-7 to E-9	263	23.2	73.4	3.4
W-1 to W-4	373	21.4	72.7	5.9
O-1 to O-3	340	24.4	65.6	10.0
O-4 to O-6	429	18.9	75.3	5.8
Total	1511	21.8	71.1	7.0
<u>Air Force</u>				
E-1 to E-3	130	22.3	66.2	11.5
E-4 to E-6	271	28.0	64.6	7.4
E-7 to E-9	284	16.9	77.8	5.3
O-1 to O-3	216	20.4	74.5	5.1
O-4 to O-6	221	15.8	81.9	2.3
Total	1122	20.7	73.4	5.9
<u>Total</u>				
E-1 to E-3	181	23.2	66.3	10.5
E-4 to E-6	326	25.8	65.0	9.2
E-7 to E-9	547	19.9	75.7	4.4
W-1 to W-4	373	21.4	72.7	5.9
O-1 to O-3	556	22.8	69.1	8.1
O-4 to O-6	650	17.8	77.6	4.6
Total	2633	21.4	72.1	6.5

Pay grade differences were minimal. In the Army sample, enlisted and warrant officer respondents were slightly more likely to report negative effects on choice of permanent housing (26 to 30%) than commissioned officers (14 to 21%). In both Services, however, the enlisted pay grades tended to be both more negative and more positive. That is, the officers more often reported no effects. Pay grade differences in effects on attitude were insignificant.

Effect of the Type of Temporary Lodging. Table G-20 illustrates the differences in perceived negative effects as a function of the type of last temporary lodgings occupied.

Table G-20

Effects of the Type of the Last Temporary Lodging Occupied (Q109-Q110)

Type of Temporary Housing	Army	Air Force
Percentage Reporting a Less than Satisfactory Choice of Permanent Housing		
Government-owned lodgings	20.8	29.7
Government-leased lodgings	27.4	37.9
Economy lodgings	29.0	36.3
Percentage Reporting a "Worsened" Attitude Toward Living Overseas		
Government-owned lodgings	22.5	18.7
Government-leased lodgings	32.8	27.6
Economy lodgings	19.5	22.5

Differences by type of temporary lodgings were minimal. Air Force respondents were somewhat more likely than the Army respondents to report negative effects of the experience on selection of permanent housing. Army respondents who had occupied government-leased lodgings were more likely than those who had occupied either government-owned or economy lodgings to report a negative effect on their attitude. No significant differences by pay grade were found.

Sponsor Program (Q143-Q144)

Respondents were asked two questions regarding their sponsors. The first dealt with the sponsor's attitude toward living conditions at the current duty station; the second, with the sponsor's assistance in helping the incoming family adjust to their new situation. During the stay in temporary lodgings, the sponsor of the new arrival (and his/her family) may play an important role in the adjustment and settling process. The degree of the sponsor's involvement varies according to the level of command support for the program as well as by individual differences in commitment or need.

Overall, 15.5 percent of the Army and 8.0 percent of the Air Force respondents reported having no sponsor. Among those with sponsors in the Army sample, approximately one-half reported their sponsors had a positive attitude compared to 31 percent

who reported a negative attitude toward living conditions at the current post. All enlisted pay grade groups were more likely to report no sponsor (28 to 35%) than were warrant and commissioned officers (5 to 10%). In the Air Force sample, the E-1 to E-3 respondents reported no sponsor more often (19.0%) than all other pay grade groups (4 to 9%). Among those with sponsors, approximately 40 percent reported their sponsors were negative and 60 percent reported they were positive. Table G-21 shows the responses to these items for officers and enlisted personnel by Service.

There was a general tendency in both Service samples for those who perceived their sponsor as having a negative attitude toward living conditions to have made less-than-satisfactory choices of permanent housing. Conversely, having a sponsor with a positive attitude or one who was rated as very helpful with family adjustment was more often associated with either no effect or a positive effect of the temporary experience on choice of permanent housing. Surprisingly, however, no strong differences in perceived effects were found as a function of not having a sponsor.

#### Housing Office Services/Satisfaction With Services and Helpfulness

Three sets of questionnaire item responses are reported in this section. The first two represent the opinions and experiences of those respondents living in economy housing only. The third set includes all the respondents, regardless of their current housing type, since it deals with more general questions about housing.

#### Housing Office Helpfulness

Table G-22 shows the distribution of responses across the six items dealing with the helpfulness of the housing office in providing services to personnel seeking economy housing.

The housing office service most often reported as not provided, in both samples, was transportation to inspect rentals (30 to 32%). An additional 17 to 22 percent also reported receiving no help with orientation to the housing market and with utilities. Services used the least in both samples were transportation to inspect rentals, orientation to the housing market and help with utility companies. The data do not, however, allow interpretation of nonprovision and nonuse. Reporting of nonprovision may be based on erroneous information or misperceptions. Nonuse may be a function of perceived deficiency of the housing office service or of lack of need for the service. Among respondents who did use the services, a majority or better rated the housing office helpful with all services listed with the exception of help with utility companies.

No pay grade differences were found in the Army sample. In the Air Force sample, the E-1 to E-3 and E-4 to E-6 respondents more often than the officers and senior enlisted respondents reported the housing office helpful with transportation.

#### Economy Housing Listings

Five items on the questionnaire asked the respondents their satisfaction with aspects of economy housing listings. Table G-23 shows the distribution of their responses.

Four of the five items on the list above are highly influenced by the availability and types of housing units in foreign locations. Both samples were most dissatisfied with the number of listings available. This may in part be a function of availability and location. The item showing the second highest level of dissatisfaction, up-to-date information on listings, is the one on the list most likely to reflect on the housing office's efforts.

Table G-21

## Reporting of Sponsor Attitude and Assistance (Q143-Q144)

Item	Army		Air Force		Total	
	Enlisted	Officer	Enlisted	Officer	Enlisted	Officer
Q143: Sponsor Attitude	(n = 534)	(n = 1334)	(n = 775)	(n = 472)	(n = 1309)	(n = 1806)
Negative	36.5	28.6	38.2	25.2	37.5	27.7
Equally negative and positive	23.2	18.0	22.7	16.7	22.9	17.6
Positive	40.3	53.4	39.1	58.1	39.6	54.7
Q144: Sponsor Assistance	(n = 495)	(n = 1441)	(n = 882)	(n = 516)	(n = 1377)	(n = 1957)
No help needed	12.7	8.2	9.2	7.4	10.4	8.0
Sponsor unavailable	11.9	5.9	11.9	5.8	11.9	5.9
Not helpful	20.2	17.5	24.3	12.8	22.8	16.2
Helpful	55.2	68.4	54.6	74.0	54.9	69.9



Table G-34

Satisfaction with Aspects of Housing, Facilities, and Services (Q57-Q87) by Housing Type (Q44): Air Force

Item	Responses (5)					
	Government-owned (n = 564)		Government-leased (n = 136)		Economy (n = 741)	
	Dissat.	Sat.	Dissat.	Sat.	Dissat.	Sat.
Q57: Overall size of residence	45.4	47.9	40.4	52.9	26.3	67.5
Q58: Bedroom size(s)	46.1	48.2	51.5	41.2	29.2	64.7
Q59: Living/dining room size	37.1	53.4	44.9	48.5	23.5	67.8
Q60: Number of bedrooms	29.4	58.2	26.5	64.0	23.0	67.0
Q61: Number of bathrooms	58.0	33.0	23.7	68.1	25.7	60.8
Q62: Operating condition of kitchen appliances	29.3	57.6	28.5	61.3	20.8	62.5
Q63: Number of kitchen appliances furnished	25.0	57.8	20.4	65.0	28.7	52.6
Q64: Adequacy of the laundry facilities	40.4	50.0	27.7	66.4	38.5	48.9
Q65: Availability/quality of government furniture	32.1	22.9	36.5	24.1	37.2	35.0
Q66: Adequacy of electrical service	27.3	57.3	22.1	66.2	16.2	66.3
Q67: Purity of the water	20.2	63.8	24.3	64.7	19.3	64.6
Q68: Hot water supply	18.8	73.6	16.9	77.2	36.0	57.5
Q69: Adequacy of heating system (including insulation)	22.0	67.9	22.1	69.1	39.9	51.0
Q70: Cost of utilities	1.4	23.1	1.5	22.1	39.6	38.1
Q71: Cost of housing	16.5	23.4	11.8	23.5	29.2	51.2
Q72: Maintenance/repair services on residence	26.1	50.5	41.6	36.5	24.1	47.8
Q73: Personal safety/security	21.8	61.5	27.9	53.7	8.4	79.0
Q74: Degree of privacy	66.5	23.4	48.5	39.7	17.7	71.7
Q75: External appearance of the residence	48.0	34.8	22.1	58.1	13.5	73.7
Q76: Appearance of the neighborhood	47.5	35.1	27.2	50.7	5.7	81.4
Q77: Number/availability of recreational facilities for teenage children	39.0	18.4	56.6	5.1	26.6	9.9
Q78: Number/availability of recreational facilities for preteen children	35.5	30.4	56.9	17.5	33.7	16.8
Q79: Convenience of residence to playgrounds	13.8	60.5	28.5	38.7	29.9	28.0
Q80: Convenience of residence to youth activity centers	13.7	54.7	53.3	16.8	37.6	9.8
Q81: Convenience of residence to post, base, or duty station	11.2	76.8	33.3	47.8	25.9	56.6
Q82: Convenience of residence to post or base facilities	7.8	81.7	41.9	39.7	28.3	54.3
Q83: Convenience of residence to medical dispensary/clinic	15.4	70.7	46.3	36.0	34.4	48.1
Q84: Convenience of residence to major medical facilities	40.1	45.0	62.5	21.3	50.5	32.9
Q85: Availability of child care services and facilities	22.7	31.7	21.2	22.6	25.1	22.0
Q86: Transportation time for children bused to school	8.0	23.1	21.2	32.1	14.0	17.8
Q87: Accessibility of public transportation	20.2	48.0	22.6	46.0	22.1	45.5

Table G-33

Satisfaction with Aspects Most Applicable to those with Children  
and/or Living off the Installation (Q57-Q87): Air Force

Housing/Facility/Service Aspect	Responses (%)			
	N/A	Dissatisfied	Neutral	Satisfied
Q78: Number/availability of recreation for preteens	26.3	36.8	14.7	22.2
Q65: Availability/quality of government furniture	17.8	35.1	17.7	29.3
Q77: Number/availability of recreation for teens	40.0	34.4	12.8	12.8
Q80: Convenience of residence to youth activity centers	25.4	29.7	16.7	28.1
Q85: Availability of child care services/facilities	31.4	23.9	18.8	25.9
Q79: Convenience of residence to playgrounds	19.0	23.6	15.8	41.6
Q71: Housing costs	24.1	22.8	15.5	37.5
Q70: Utility costs	32.2	21.3	16.0	30.5
Q86: Transportation time for children bused to school	50.9	12.3	15.5	21.3

Pay grade was statistically related to only three of the items listed in Table G-33. The E-1 to E-3 respondents were more satisfied than the O-1 to O-3 group with government furniture. On the other hand, since they most often lived in economy housing, the E-1 to E-3s were less satisfied than were almost all other pay grade groups with convenience of their residences to playgrounds and youth activity centers.

Table G-34 shows the percentages dissatisfied and satisfied with aspects of housing, facilities, and services by current housing type. Occupants of economy housing were more satisfied than those living in government-leased and government-owned housing with overall size of the residence, bedroom size(s), living/dining room size, number of bathrooms, and personal safety/security. Occupants of economy housing were also more satisfied than were those in government-owned housing with number of bedrooms, operating condition of kitchen appliances, and electrical service adequacy.

On the other hand, occupants of government-owned housing were more satisfied than were those in government-leased or economy housing with convenience of the residence to the installation and support facilities. Those in government-owned and in government-leased housing were more satisfied than were those in economy housing with hot water supply and heating systems. These findings are similar to those found in the Army sample and probably reflect the greater number of junior enlisted in economy housing that may be less modern in terms of household systems than government housing, as well as located farther from the installation and government support facilities.

Table G-32

Satisfaction with 22 Aspects of Housing, Facilities, and Services (Q57-Q87): Air Force

Housing/Facility/Service Aspect	Responses (%)			
	N/A	Dissatisfied	Neutral	Satisfied
Q84: Convenience of residence to major medical facilities	0.8	47.8	15.0	36.4
Q74: Degree of privacy	0.0	39.8	10.4	49.8
Q64: Laundry facility adequacy	2.1	38.2	8.8	51.0
Q61: Number of bathrooms	0.0	38.2	11.2	50.6
Q58: Bedroom size(s)	0.1	38.1	6.0	55.8
Q57: Overall size of residence	0.1	35.3	6.3	58.3
Q69: Heating system adequacy (including insulation)	0.3	31.2	9.1	59.4
Q59: Living/dining room size	0.2	30.9	8.6	60.3
Q83: Convenience of residence to dispensary/clinic	0.4	28.2	15.7	55.7
Q75: External appearance of residence	0.0	28.0	15.2	56.9
Q68: Hot water supply	0.0	27.5	6.8	65.8
Q63: Number of kitchen appliances furnished	3.6	26.6	14.0	55.8
Q72: Maintenance/repair services on residence	7.0	26.6	18.7	47.7
Q60: Number of bedrooms	0.1	25.9	10.8	63.2
Q62: Operating condition of the kitchen appliances	1.8	25.0	12.8	60.4
Q76: Neighborhood appearance	0.1	24.3	15.4	60.2
Q82: Convenience of residence to duty station facilities	0.2	21.9	14.5	63.3
Q87: Accessibility of public transportation	7.1	21.4	24.8	46.6
Q66: Adequacy of electric service	0.7	21.1	15.4	62.9
Q81: Convenience of residence to duty station	0.8	20.9	14.7	63.7
Q67: Water purity	0.1	20.1	15.3	64.4
Q73: Personal safety/security	0.3	15.4	14.5	69.8

Not surprisingly, occupants of government-leased and government-owned housing were more satisfied than those in economy housing with utility costs, and those in government-leased housing were more satisfied than those in economy housing with the cost of their housing. Those in government-owned and economy housing were more satisfied than those in government-leased housing with the number/availability of recreational facilities for teenage children.

On the other hand, residents of government-owned housing were more satisfied than those in economy or government-leased housing with recreational facilities for preteens, convenience of the residence to youth centers, the availability of child care services and facilities, and transportation time for children bussed to school. These findings would be expected since the more junior service members tend to be in economy housing more often than the senior personnel and because most government-leased housing is located off the installation in the economy.

Air Force Responses to Satisfaction Items. Table G-32 shows the satisfaction responses of the Air Force respondents with respect to aspects of housing, facilities, and services.

A majority of the respondents expressed satisfaction with 18 of the 22 housing aspects listed in the table above. Significant minorities of respondents were dissatisfied with only three housing aspects, convenience of the residence to major medical facilities, privacy, and adequacy of the laundry facilities.

Pay grade was statistically related to 13 of the 22 items above. In general, the lowered graded enlisted (especially the E-1 to E-3s) were more satisfied than the senior enlisted and senior officers with bedroom size, number of bedrooms, privacy, external appearance of the residence, and neighborhood appearance. On the other hand, the senior enlisted and senior officer respondents were generally more satisfied than the lower graded enlisted respondents (primarily E-1 to E-6) with laundry facilities, water purity, hot water supply, heating systems, and personal safety/security. The senior enlisted and senior officers were also more satisfied than the E-1 to E-3s with convenience of their residences to government support facilities. These findings stand to reason since the junior enlisted more often live in economy housing which in Germany may be more spacious than the government-owned stairwell units (i.e., the senior enlisted and senior officers showed greater dissatisfaction with size and appearances). However, the economy housing that the junior enlisted personnel can afford may also be older and less modern with respect to housing systems.

The presence or absence of children was related to 10 of the items in Table G-32. Respondents without children in their households were more satisfied than were those with children with overall size of the residence, bedroom size(s), number of baths, security, privacy, and appearances (of the residence and neighborhood). Those with children were more satisfied than those without children with laundry facilities, hot water and heating systems. These findings, again, probably reflect the greater number of respondents without children who live in economy housing, especially the more junior grades.

Table G-33 presents the responses to the remaining nine items that applied to only part of the sample and were especially applicable to those with children and/or who were living in economy housing.

More dissatisfaction than satisfaction was expressed with the quality and availability of government furniture and with the number/availability of recreational opportunities for children. The relatively low level of dissatisfaction with utility and housing costs is more probably a reflection of the low number of respondents who live in economy housing.

Table G-31

Satisfaction with Aspects of Housing, Facilities, and Services (Q57-Q87) by Housing Type (Q44): Army

Item	Responses (%)					
	Government-owned (n = 1493)		Government-leased (n = 292)		Economy (n = 477)	
	Dissat.	Sat.	Dissat.	Sat.	Dissat.	Sat.
Q57: Overall size of residence	47.1	48.0	30.8	61.6	21.4	74.6
Q58: Bedroom size(s)	54.1	40.5	40.8	51.0	25.4	67.3
Q59: Living/dining room size	35.6	54.2	33.9	59.6	22.6	70.4
Q60: Number of bedrooms	30.1	61.6	22.6	67.5	22.0	73.4
Q61: Number of bathrooms	46.6	45.4	25.7	67.8	21.6	70.0
Q62: Operating condition of kitchen appliances	33.6	53.5	26.7	62.3	22.7	67.3
Q63: Number of kitchen appliances furnished	29.8	52.7	25.3	62.0	28.3	52.1
Q64: Adequacy of the laundry facilities	35.0	54.3	20.2	74.0	36.9	52.1
Q65: Availability/quality of government furniture	38.7	38.7	27.1	52.6	36.8	40.5
Q66: Adequacy of electrical service	30.8	56.8	21.9	67.5	14.9	71.1
Q67: Purity of the water	41.8	44.7	37.3	53.8	30.4	57.0
Q68: Hot water system	19.8	17.3	19.2	73.6	23.3	69.8
Q69: Adequacy of heating system (including insulation)	28.3	61.6	19.5	73.6	30.4	60.2
Q70: Cost of utilities <sup>a</sup>	2.7	23.7	4.5	28.1	44.8	37.1
Q71: Cost of housing <sup>a</sup>	16.3	22.2	13.7	28.8	39.6	44.2
Q72: Maintenance/repair services on residence	29.0	50.2	32.2	47.3	21.3	50.5
Q73: Personal safety/security	28.4	57.5	23.6	63.4	8.6	81.1
Q74: Degree of privacy	55.9	32.7	29.5	59.6	11.5	81.6
Q75: External appearance of the residence	40.8	44.4	25.0	64.0	10.7	80.7
Q76: Appearance of the neighborhood	41.1	42.4	24.0	64.4	6.3	84.3
Q77: Number/availability of recreational facilities for teenage children <sup>a</sup>	40.1	19.9	48.6	11.0	28.6	13.6
Q78: Number/availability of recreational facilities for preteen children <sup>a</sup>	39.9	32.4	51.7	26.0	38.1	23.8
Q79: Convenience of residence to playgrounds	15.0	69.4	33.7	50.2	32.9	35.6
Q80: Convenience of residence to youth activity centers <sup>a</sup>	25.6	48.3	54.1	19.1	43.5	13.5
Q81: Convenience of residence to post, base, or duty station	13.1	75.9	33.6	52.4	32.3	51.2
Q82: Convenience of residence to post or base facilities	14.7	75.0	37.3	48.3	37.5	46.8
Q83: Convenience of residence to medical dispensary/clinic	19.1	69.8	41.1	44.5	45.9	41.9
Q84: Convenience of residence to major medical facilities	47.7	41.2	59.2	32.5	58.5	29.8
Q85: Availability of child care services and facilities <sup>a</sup>	28.6	32.9	40.8	29.1	37.1	22.1
Q86: Transportation time for children bused to school <sup>a</sup>	11.7	35.0	28.5	33.3	24.2	20.2
Q87: Accessibility of public transportation	11.7	67.2	19.9	56.8	19.0	58.5

<sup>a</sup>Not applicable to 10 percent or more of the respondents.

Table G-30

Satisfaction with Aspects Not Applicable to 10 Percent  
or More of the Respondents (Q57-Q87): Army

Housing/Facility/Service Aspect	Responses (%)			
	N/A	Dissatisfied	Neutral	Satisfied
Q78: Number/availability of recreation for preteens	15.3	41.1	13.9	29.7
Q77: Number/availability of recreation for teens	29.6	39.0	14.0	17.4
Q80: Convenience of residence to youth activity centers	13.5	33.5	16.1	37.0
Q85: Availability of child care services/facilities	19.1	32.3	18.7	29.9
Q71: Housing costs	40.3	21.0	10.5	28.3
Q86: Transportation time for children bused to school	37.1	16.7	14.6	31.6
Q70: Utility costs	49.6	11.9	10.9	27.5

On the other hand, certain features were more satisfactory to the residents of government-leased or government-owned housing. These features of the housing were primarily the convenience of the residence to government support facilities and to local public transportation.

The presence or absence of children in the household was statistically related to 8 of the 24 items listed in Table G-29. Those without children were more satisfied than those with children with overall size of the residence, bedroom size(s), number of bathrooms, safety/security, privacy, and external appearance of the residence.

Table G-30 shows the satisfaction levels of the respondents with those housing aspects that applied only to part of the sample. Again, they are arranged in descending order of the percentages who were dissatisfied. These aspects were of greatest concern to respondents with children and/or those living in economy housing.

Dissatisfaction was greater than satisfaction on three of the items listed in Table G-30: the number/availability of recreational facilities for preteen and teenage children and the availability of child care services and facilities.

Pay grade was statistically related to only two of the items above. The O-1 to O-3 respondents were more satisfied than the E-7 to E-9 respondents with recreational facilities for preteens, and the O-1 to O-3s were more satisfied than the E-1 to E-3s with convenience of their residences to youth activity centers. These findings may be merely a reflection of fewer children in the O-1 to O-3 group or in the age group that would use those particular facilities.

Table G-31 shows the percentages dissatisfied and satisfied with aspects of the housing, facilities, and Services by the three major housing types.

Table G-29

Satisfaction with 24 Aspects of Housing, Facilities, and Services (Q57-Q87): Army

Housing/Facility/Service Aspect	Responses (%)			
	N/A	Dissatisfied	Neutral	Satisfied
Q84: Convenience of residence to major medical facilities	0.4	51.8	10.4	37.4
Q58: Bedroom size(s)	0.1	45.9	6.2	47.8
Q74: Degree of privacy	0.0	42.9	10.3	46.7
Q57: Overall size of residence	0.1	39.1	5.1	55.7
Q67: Water purity	0.2	38.8	12.6	48.5
Q60: Number of bathrooms	0.2	38.3	7.7	53.8
Q65: Availability/quality of government furniture	6.0	36.4	16.3	41.2
Q64: Laundry facility adequacy	1.1	33.3	9.0	56.6
Q59: Living/dining room size	0.1	32.3	9.0	58.6
Q75: External appearance of residence	0.0	32.3	13.1	54.6
Q76: Neighborhood appearance	0.2	31.4	14.3	54.1
Q62: Operating condition of the kitchen appliances	1.3	30.1	10.9	57.7
Q63: Number of kitchen appliances furnished	3.1	28.9	14.1	53.9
Q83: Convenience of residence to dispensary/clinic	0.2	28.2	11.4	60.2
Q72: Maintenance/repair services on residence	7.4	27.9	14.9	49.8
Q69: Heating system adequacy (including insulation)	0.6	27.7	9.0	62.6
Q60: Number of bedrooms	0.1	27.3	7.6	65.0
Q66: Adequacy of electric service	0.9	26.1	11.6	61.4
Q73: Personal safety/security	0.3	23.6	12.8	63.4
Q82: Convenience of residence to government facilities	0.2	23.1	11.8	65.0
Q79: Convenience of residence to playgrounds	7.7	21.4	11.4	59.5
Q68: Hot water supply	0.1	20.6	6.7	72.5
Q81: Convenience of residence to the installation	0.5	19.9	12.0	67.6
Q87: Accessibility of public transportation	3.9	14.5	17.8	63.9

two factors than in the other three factors. The Service differences were relatively minor. Compared to the Army, Air Force respondents did not include convenience to playgrounds and youth activity centers in their convenience factor; they included the number of bathrooms, but excluded privacy in the second factor (making it a much more pure size factor); safety/security was excluded from the immediate physical/psychological surroundings factor; and laundry facilities and government furniture did not appear in the systems/kitchen factor.

Despite Service differences and overlaps, the groupings are quite distinct. Satisfaction with the residence is multidimensional and involves convenience, size/privacy, immediate physical-psychological surroundings, recreation for children, and systems/kitchens, with overall satisfaction most closely associated with size/privacy and immediate physical-psychological surroundings.

Army Responses to Satisfaction Items. Of the 31 satisfaction items, 24 were applicable to almost all of the respondents (less than 10.0% reported the item as not applicable). Table G-29 shows the distribution of Army responses to these housing, facilities, and services items arranged in descending order of the percentage dissatisfied. Responses to the remaining seven items are shown separately in Table G-30.

Overall, satisfaction was higher than dissatisfaction on all but one of the 24 items, that being convenience of the residence to major medical facilities. A majority of the respondents expressed satisfaction on 18 of the 24 items.

A majority or a significant minority of the respondents were very or somewhat dissatisfied with only three of the items listed, convenience of the residence to major medical facilities (51.8%), bedroom size(s) (45.9%), and degree of privacy (42.9%). With respect to the latter item, complaints about the noise in stairwell housing were very common. Respondents frequently commented that if any couple in the stairwell was arguing, all the other people in that stairwell could hear them. Others mentioned being able to hear something dropped on the fourth floor from the first floor of the stairwell. The problem of unsupervised children playing in the stairwell during inclement weather was another frequently heard complaint.

Pay grade was statistically related to 17 of the 24 items on the list above. In general, the E-4 to E-6 and O-1 to O-3 pay grade groups were more satisfied than the O-4 to O-6s with residence and rooms sizes and with the number and operating condition of kitchen appliances. The commissioned officers were generally more satisfied than the enlisted and warrant officer respondents with aspects of their residence such as laundry facilities, heating, security, and most items that dealt with convenience of the residence to support facilities and services.

The type of housing was related to 23 of the 24 items shown in Table G-29. Of these, satisfaction with aspects of the housing other than conveniences was higher among residents of government-leased and economy housing than among those in government-owned housing. In particular, the occupants of government-leased and economy housing were more satisfied than those in government-owned housing with residence size, bedroom size(s), number of baths, operating condition of kitchen appliances, electrical service, privacy, external appearance of the residence and neighborhood appearance. Respondents living in economy housing were also more satisfied than those in government-owned housing with living/dining room size, number of bedrooms, and water purity. Occupants of government-leased housing were more satisfied than those in economy housing with the adequacy of their heating systems (including insulation).



remaining satisfaction items from the list of 31, pay grade, number of live-in dependents, presence or absence of children in the home, the effect of the temporary lodging experience on attitude and on selection of permanent lodging, and overall satisfaction with the temporary lodgings. This does not mean, however, that the influence of these variables should be dismissed, but rather that the first variable in each list had the most influence.

#### Satisfaction With Aspects of Housing, Facilities, and Services

Grouping the Satisfaction Items. Another statistical method, factor analysis, was used to determine the various dimensions or components involved in the concept of satisfaction. This procedure produces groupings of items that are involved in satisfaction as measured by the items that are included in the analysis. In this case, all 33 of the housing, facilities, and services items were used.

The results showed consistency across the Services. Five groupings of items (factors) were found, as shown in Table G-28 below.

Table G-28  
Groupings of Satisfaction Items (Q57-Q89)

Groupings (Items)
LOCATION/CONVENIENCE (Including satisfaction with convenience to playgrounds, youth activity centers, the installation, government facilities, dispensary/clinic, and major medical facilities; availability of child care facilities and services, transportation time for children being bused to school; and accessibility of public transportation).
SIZE/PRIVACY (Including satisfaction with size of residence, bedroom(s), and living/dining room; number of bedrooms and baths; and privacy; and service member and spouse overall satisfaction).
IMMEDIATE PHYSICAL-PSYCHOLOGICAL SURROUNDINGS (Including satisfaction with personal security and safety, privacy, external appearance of the residence, and neighborhood appearance, and service member and spouse overall satisfaction).
RECREATION FOR CHILDREN (Including satisfaction with number/availability of recreational facilities for preteens and teens, and convenience to playgrounds and youth activity centers).
SYSTEMS/KITCHENS (Including satisfaction with operating condition of kitchen appliances, number of kitchen appliances, laundry facilities, government furniture and electrical service).

Some Service differences and overlapping of items were found. In both samples, service member and spouse overall satisfaction were part of the size/privacy and immediate physical/psychological surroundings factors. This finding may be interpreted as indicating a stronger relationship between overall satisfaction and the items in those

Table G-26

Variables Contributing Most to Prediction (Description) of Overall  
Satisfaction with the Residence: Army

Respondents Living in Government- owned Housing	Respondents Living in Leased, Economy, or Other Housing
Satisfaction with residence size	Satisfaction with privacy
Satisfaction with external appearance of the residence	Satisfaction with residence size
Satisfaction with laundry facilities adequacy	Satisfaction with maintenance and repair services
Effect of the temporary lodging experience on attitude toward living in a foreign location	Satisfaction with overall comfort and adequacy of the temporary lodgings
Satisfaction with living/dining room size	Satisfaction with external appearance of residence
	Satisfaction with personal safety/security
R = .77	R = .77

Table G-27

Variables Contributing Most to Prediction (Description) of Overall  
Satisfaction with the Residence: Air Force

Respondents Living in Government- owned Housing	Respondents Living in Leased, Economy, or Other Housing
Satisfaction with privacy	Satisfaction with residence size
Satisfaction with housing costs	Satisfaction with personal safety/security
Satisfaction with residence size	Satisfaction with external appearance of residence
Satisfaction with number availa- bility of recreational facilities for teens	Satisfaction with convenience of residence to government facilities
Pay grade	
R = .78	R = .73

Air Force respondents showed exactly the opposite of the Army sample in terms of the major component of their overall satisfaction as a function of their housing type. Satisfaction with degree of privacy was the best predictor of overall satisfaction among those living in government-owned housing, while satisfaction with overall residence size was the best predictor of overall satisfaction among those living off the installation.

The other variables that were put into the regression analysis did not impact dramatically on the prediction of overall satisfaction. These variables were all of the

Table G-25

## Satisfaction with Overall Comfort and Adequacy of the Residence (Q88-Q89)

Respondent	n	Responses (%)		
		Dissatisfied	Neutral	Satisfied
<u>Army</u>				
Service member	2,313	31.7	9.3	59.0
Spouse	2,287	37.1	8.1	54.8
<u>Air Force</u>				
Service member	1,457	25.9	11.6	62.5
Spouse	1,423	33.1	9.3	57.6

Overall Satisfaction by Pay Grade, Housing Type, and Household Composition. No differences in overall satisfaction were found as a function of pay grade group in either Service. In the Army sample, both service member and spouse overall satisfaction were lower among those living in government-leased or economy housing than among those living in government-owned housing. In the Air Force sample, service member and spouse overall satisfaction were lower among residents of economy housing than among those living in either government-leased or government-owned housing. In the Air Force sample only, respondents, and spouses without children were reported to be more dissatisfied overall than were those with live-in dependent children.

Prediction of Overall Satisfaction. Multiple regression is a general statistical technique through for analyzing the relationship between one variable and a set of other variables. One purpose of the technique is to predict or describe the outcome variable (in this case, overall satisfaction with the residence) on the basis of other variables. Regression analysis was applied to the 31 satisfaction items and a selected number of demographic and experiential items on the questionnaire (e.g., pay grade group, number of dependents) to determine which items could be used to best describe (or predict) service member overall satisfaction.

For the analysis, each sample was broken down into two groups based on their current housing type (i.e., in government-owned housing on the installation versus off the installation in government-leased, economy, or "other" types of housing). In Tables G-26 and G-27, the individual variables that best predicted or described overall service member satisfaction are presented in the order of their importance to the prediction. The Rs at the bottom of the columns are multiple correlation coefficients. These may be interpreted as indicators of the degree of predictability of the outcome (overall satisfaction) from the combination of variables shown. The maximum possible is a perfect correlation (perfect prediction) of 1.00.

In the Army sample of respondents living in government-owned housing, the major component of overall satisfaction with the residence was satisfaction with the size of that residence. However, for those living off the installation (i.e., in government-leased, economy, or other types of housing), the major component was the degree of privacy.

Table G-24

Satisfaction with Waiting Time and Assignment and Referral Services (Q40-Q42)

Item	n	Responses (%)		
		Dissatisfied	Neutral	Satisfied
<u>Army</u>				
Q40: Length of wait for government housing	2,181	51.9	5.6	42.5
Q41: Referral services of the housing office	1,527	57.3	18.3	24.4
Q42: Assignment services of the housing office	1,958	43.7	16.5	39.8
<u>Air Force</u>				
Q40: Length of wait for government housing	1,127	52.2	12.6	35.2
Q41: Referral services of the housing office	1,094	59.4	20.1	20.5
Q42: Assignment services of the housing office	1,069	46.8	25.6	27.6

## SATISFACTION WITH PERMANENT HOUSING, FACILITIES, AND SERVICES

### Satisfaction Levels

Respondents were asked their satisfaction with 31 aspects of their residence and other support facilities and services. Two additional items addressed the service member's and spouse's satisfaction with the overall comfort and adequacy of their current residence. Descriptive data on satisfaction, as well as characteristics of the individuals and housing and experiences related to satisfaction, are presented in this section.

### Overall Satisfaction

Table G-25 shows the overall satisfaction levels of service members and their spouses with the comfort and adequacy of the residence. (It is assumed that the service members answered for their spouse on this item.)

The majority of service members in each Service were satisfied with their current residences. Spouses were consistently reported as more dissatisfied than the service members.

Table G-23

## Satisfaction with Aspects of Economy Housing Listings (Q29-Q33)

Listing Aspect	n	Responses (%)		
		Dissatisfied	Neutral	Satisfied
<u>Army</u>				
Q29: Number of listings	446	74.0	9.7	16.3
Q30: Up-to-date information on listings	461	55.5	16.3	28.2
Q31: Size of housing units	476	43.9	22.9	33.2
Q32: Rental costs	477	46.5	21.4	32.1
Q33: Commuting distances from rentals to the installations	488	34.8	19.3	45.9
<u>Air Force</u>				
Q29: Number of listings	730	73.4	9.3	17.3
Q30: Up-to-date information on listings	722	49.6	18.8	31.6
Q31: Size of housing units	732	47.4	18.0	34.6
Q32: Rental costs	732	33.9	22.2	43.9
Q33: Commuting distances from rentals to installations	739	30.3	21.1	48.6

The only significant difference in satisfaction levels by Service was in satisfaction with rental costs. The Army respondents were more often dissatisfied with costs than were the Air Force respondents.

No pay grade differences in satisfaction were found in the Army sample. In the Air Force sample, the E-1 to E-3 respondents tended to be more satisfied than the senior enlisted and officers with number of listings available and with the sizes of the rental units. These differences may be based on differential expectations of the pay grade groups.

Satisfaction With Waiting Time for Government Housing and Assignment and Referral Services of the Housing Office

Table G-24 presents the responses for the total samples regarding satisfaction levels with assignment and referral services and waiting time for government housing.

A majority of respondents in both Services were dissatisfied with both the wait for government housing and the referral services of the housing office. Dissatisfaction was approximately the same in each Service.

In the Army sample, the E-4 to E-6 respondents were significantly more dissatisfied with the wait for government housing than were the warrant and commissioned officers. The E-7 to E-9 respondents were more dissatisfied than the O-4 to O-6 respondents. In the Air Force sample, the E-1 to E-3 respondents were more dissatisfied with referral services than were the O-1 to O-3 respondents.

Table G-22  
Housing Office Helpfulness (Q34-Q39)

Housing Office Service	n	Responses (%)			
		Not Provided	Did Not Use	Not Helpful	Helpful
<u>Army</u>					
Q34: Orientation to the local housing market	519	22.6	14.8	20.8	41.8
Q35: Transportation to inspect rentals	519	31.6	22.0	14.8	31.6
Q36: Language interpretation dealing with landlords	515	8.1	27.6	11.3	53.0
Q37: Lease review and/or rental negotiation	515	5.4	14.8	14.6	65.2
Q38: Overall help finding economy housing	517	6.5	15.3	32.9	45.3
Q39: Help with utility companies	518	18.6	35.3	27.0	19.1
<u>Air Force</u>					
Q34: Orientation to the local housing market	760	17.2	12.7	24.3	45.8
Q35: Transportation to inspect rentals	760	29.5	21.6	19.7	29.2
Q36: Language interpretation dealing with landlords	755	8.1	28.7	14.3	48.9
Q37: Lease review and/or rental negotiation	756	2.8	10.7	15.5	71.0
Q38: Overall help finding economy housing	760	3.8	10.8	35.1	50.3
Q39: Help with utility companies	757	21.4	39.9	22.1	16.6

## Usage of Facilities

A series of items addressed the reliance of service members and their families on government and economy facilities by asking whether or not the facilities were available and their typical level of usage of them. Of the nine types of facilities queried, only child care was reported to be unavailable by just a few respondents (5.0% Army, 3.0% Air Force).

Table G-35 illustrates the usage of each of the types of facilities for both Services.

Heaviest reliance on government facilities in both Services was found for food shopping, medical/dental care, and school, religious, child care and library facilities. Significant minorities of the respondents reported usage of economy facilities for nonfood shopping, recreation, and entertainment.

Pay grade differences were primarily a function of spouse nationality. That is, service members married to local nationals (most often found in the E-4 to E-9 pay grade groups) more often than other pay grade groups reported heavier usage of economy facilities.

## Use and Satisfaction With Government-furnished and Loaner Furniture

In addition to the single satisfaction item on government furniture in the list of 31 aspects of housing, facilities, and services, service members were asked to respond to five items concerning their attitudes toward and experiences with government-furnished and loaner furniture.

### Government-furnished Furniture (Q99, Q100)

A large majority of the respondents in both Services reported they were using all or most of their own furniture at the time of the survey (67.9% Army, 74.0% Air Force). However, even more preferred using their own furniture than were currently using it (84.9% Army, 91.7% Air Force).

By pay grade group, in the Army sample, the E-7 to E-9s and O-4 to O-6s reported using all or most of their own furniture somewhat more often (72.0 to 77.0%) than the other pay grade groups (58.0 to 68.0%). However, preference for using their own furniture was very high across pay grade groups (74.0 to 89.0%). In the Air Force sample, the E-1 to E-3 group showed the lowest percentage using most or all of their own furniture (35.9%) followed by the E-4 to E-6 group (53.5%). By comparison, the overwhelming majority of all other pay grade groups were using their own furniture (82.0 to 97.0%). Nearly all of the Air Force service members (90.0 to 97.0%) preferred to use all or most of their own furniture, except the E-1 to E-3 group who showed only a 77 percent preference.

### Loaner Furniture

A majority of respondents in both Services (60.3% Army and 54.4% Air Force) reported having had some experience using loaner furniture. Table G-36 reports their opinions of this furniture.

Table G-35

## Usage of Economy and Government Facilities

Facilities	Army		Air Force		Total	
	Enlisted	Officer	Enlisted	Officer	Enlisted	Officer
Q90: Food shopping facilities						
Economy	2.7	1.3	1.9	2.3	2.3	1.6
Half and half	19.4	15.1	17.9	14.9	18.6	15.0
Government	77.9	83.6	80.2	82.8	79.1	83.4
Q91: Nonfood shopping facilities						
Economy	10.5	6.5	8.9	9.4	9.6	7.2
Half and half	35.6	39.4	37.0	39.2	36.3	39.3
Government	53.9	54.1	54.1	51.4	54.0	53.5
Q92: Medical/dental facilities						
Economy	1.4	1.7	1.1	1.0	1.2	1.5
Half and half	3.9	3.2	3.4	2.7	3.6	3.1
Government	94.7	95.1	95.5	96.3	95.1	95.4
Q93: School facilities						
Economy	2.7	4.8	3.6	5.6	3.1	5.0
Half and half	2.3	3.5	1.2	5.4	1.7	3.9
Government	95.0	91.7	95.2	89.0	95.1	91.1
Q94: Recreation (sports) facilities						
Economy	11.4	15.5	9.5	15.9	10.3	15.6
Half and half	26.9	31.2	27.3	33.1	27.1	31.7
Government	61.7	53.3	63.2	51.0	62.5	52.7
Q95: Entertainment (theatres, etc.) facilities						
Economy	7.4	9.4	8.4	14.0	7.9	10.6
Half and half	23.0	29.5	27.0	29.8	25.2	29.6
Government	69.6	61.1	64.6	56.2	66.8	59.9
Q96: Religious facilities						
Economy	8.5	8.3	12.4	10.9	10.6	8.9
Half and half	5.6	4.8	7.1	3.3	6.4	4.4
Government	85.9	87.0	80.6	85.7	83.0	86.7
Q97: Library facilities						
Economy	0.7	0.8	1.1	0.8	0.9	0.8
Half and half	2.3	2.6	2.1	2.3	2.2	2.5
Government	97.0	96.7	96.8	96.9	96.9	96.7
Q98: Child care facilities						
Economy	8.4	10.7	12.0	20.0	10.3	12.8
Half and half	6.4	9.0	7.0	7.5	6.7	8.6
Government	85.2	80.3	80.9	72.5	83.0	78.5



Table G-36

## Opinions of Loaner Furniture (Q101-Q103)

Opinion	Responses (%)		
	Army	Air Force	Total
Q101: Adequacy of the quantity of loaner furniture received while awaiting arrival of their own	(n = 1671)	(n = 915)	(n = 2586)
Less than needed	22.3	25.0	23.3
Adequate	64.8	69.4	66.4
More than needed	12.9	5.6	10.3
Q102: Satisfaction with the condition of loaner furniture	(n = 1694)	(n = 939)	(n = 2633)
Dissatisfied	35.2	36.0	35.5
Neither dissatisfied nor satisfied	16.2	19.8	17.5
Satisfied	48.6	44.2	47.0
Q103: Appropriateness of the size of the loaner furniture provided	(n = 1680)	(n = 935)	(n = 2615)
Too small	10.8	11.6	11.1
About the right size	84.5	83.5	84.2
Too large	4.6	4.9	4.7

The majority of the respondents in both Services were generally satisfied with the size and quantity of the loaner furniture they received, although nearly one-quarter in each Service felt they had not received enough. Significant minorities in each Service, however, were dissatisfied with the condition of the loaner furniture.

By pay grade group, in the Army sample, pay grade did not relate to the opinions of loaner furniture with the exception of a slight tendency for the officers to be more dissatisfied than the enlisted with the condition of the furniture. In the Air Force sample, the O-1 to O-3 group more often than the other groups reported receiving less furniture than needed (34.9% versus 17 to 26% in the other pay grade groups). With regard to the condition of the furniture received, the E-4 to E-9 and O-1 to O-3 groups expressed more dissatisfaction than the E-1 to E-3 and O-4 to O-6 groups.

## PROBLEMS

### Reporting of Problem Areas

Respondents were asked to indicate, from a list of 21, the three most serious problems (in rank order of seriousness) that they encountered at their present location. Table G-37 shows the percentage of Army and Air Force respondents who ranked each of the problems as their first, second, or third most serious. It should be noted that one would expect an average of approximately 14 percent (3 choices in 21) for each problem if choices were made randomly. Thus, percentages of approximately 4 percent above or below 14 percent are statistically meaningful and indicate definite trends for the sample to choose or not choose a particular problem.

Table G-37

Problem Areas Selected as One of the Three Most Serious (Q140-Q142)

Problem	Army		Air Force	
	%	Rank	%	Rank
Permanent housing	30.1	1	32.7	1
Working conditions	24.5	2	22.7	4
Shipping and storage of household goods	24.1	3	17.9	9
Medical/dental care	23.3	4	19.5	6
Spouse employment	21.0	5	25.2	3
Language and cultural differences	18.6	6	26.4	2
Temporary lodging	17.5	7	18.5	8
Family adjustment	14.9	8	14.8	10
Schools	14.5	9	7.2	17
Child care	13.7	10	7.4	16
Vehicles (shipping, insurance, inspection)	12.9	11	19.3	7
Shopping	12.5	12	8.8	14
Initial housing costs	12.4	13	21.2	5
Local telephone service	10.3	14.5	10.1	13
Living expenses	10.3	14.5	13.5	11
Recreation and entertainment	9.2	16	8.1	15
Separation and related problems due to unaccompanied status	8.8	17	5.3	18
Transportation	7.7	18	10.3	12
Security	7.0	19	5.0	19
Other (unspecified)	3.7	20	3.8	20
Utility services (other than costs)	1.6	21	1.6	21

Permanent housing, the most frequently chosen problem, was selected by about 30 percent in each of the Services. Working conditions, medical/dental care, spouse employment, language and cultural differences, and shipping and storage of household goods were statistically highly selected problems in both Services. In the Air Force sample, initial housing costs were also reported to be a problem (21.2%), but not in the Army sample (12.4%). Vehicles were a frequently chosen problem in the Air Force (19.3%), but not in the Army (12.9%).

Areas that were of least concern in both Services (less than 11% selection) were local telephone service, recreation and entertainment, separation, transportation, security, and utility services (other than costs).

The problems most frequently selected by service members in Germany cover several distinct areas: housing (permanent and temporary), working conditions, medical/dental care, spouse employment, language and cultural differences, and shipping and storage of household goods.

### Army

Table G-38 shows the percent of each pay grade group that chose problems that were selected by at least 14 percent of all the respondents. The percentage next to each problem is the percentage of all respondents that selected that problem.

The E-1 to E-3 group was somewhat less likely than the other pay grade groups to select permanent housing, medical/dental care, and (along with the E-4 to E-6 group) temporary lodging. Also, they were more likely than the other groups to see language and cultural differences as a serious problem. The E-7 to E-9 group was slightly less likely to see language and cultural differences as a serious problem and especially less likely than the E-1 to E-6 groups. Warrant officers, along with the E-4 to E-6 group, were more likely to consider working conditions among their three most serious problems. Senior officers were slightly more likely to report permanent housing as a problem than the other pay grade groups (much more so than the junior enlisted service members). They were also more likely than the other pay grade groups to report shipping and storage of household goods and schools as serious problems.

Type of housing was statistically related to the frequency of choice of many of the 21 problems. As would be expected, those living in economy housing were more likely to report initial housing costs and living expenses among their most serious problems. Individuals living off the installation (i.e., in government-leased, economy, or other types of housing) were more likely to report transportation as a problem. Residents of government-owned housing more frequently than residents of economy housing chose the following among their most serious problems: shipping and storage of household goods, temporary lodging facilities, permanent housing, schools, and personal safety/security. Residents of government-leased housing more frequently than those in government-owned or economy housing chose medical/dental care, schools, child care, spouse employment, and transportation. Again, some of these relationships may be a function of characteristics of the individuals who are more or less likely to live in different types of housing, than of the housing itself.

In the Army sample, a few problems appeared to be influenced by the presence or absence of children in the household. Service members without children living with them more frequently than those with children reported language and cultural differences, working conditions, initial housing costs, living expenses, and spouse employment as

Table G-38

## Problems by Pay Grade Group: Army

Problem (% Overall)	Responses (%)					
	E-1 to E-3 (n = 88)	E-4 to E-6 (n = 280)	E-7 to E-9 (n = 373)	W-1 to W-4 (n = 428)	O-1 to O-3 (n = 425)	O-4 to O-6 (n = 430)
Permanent housing (30.1)	21.6	27.5	29.8	29.0	29.2	36.0
Working conditions (24.5)	23.9	30.7	23.6	32.7	18.6	19.1
Shipping and storage of household goods (24.1)	22.7	18.6	16.1	24.1	24.2	34.9
Medical/dental care (23.3)	13.6	20.7	24.1	27.1	23.3	22.3
Spouse employment (21.0)	19.3	25.7	24.4	21.3	20.5	15.6
Language and cultural differences (18.6)	35.2	25.4	11.3	17.3	19.8	17.2
Temporary lodging (17.5)	10.2	6.8	17.7	22.4	20.0	18.4
Family adjustment (14.9)	15.9	12.9	10.7	11.7	18.6	19.1
Schools (14.5)	4.5	7.1	16.6	13.8	6.8	27.7

problems. Service members with children were more likely than those without children to choose child care and schools. The relationships between problems and the presence or absence of children noted above may be due in part to other factors. For example, a much larger percentage of service members with the children lived in government-owned housing than those without children, and vice versa for economy housing. A higher percentage of the lower pay grade groups did not have children compared to their higher graded counterparts.

### Air Force

Table G-39 presents the percentage of Air Force members in each pay grade group who selected problems that were chosen by at least 15 percent of the total number of respondents.

Table G-39

#### Problems by Pay Grade Group: Air Force

Problem (% Overall)	Responses (%)				
	E-1 to E-3 (n = 196)	E-4 to E-6 (n = 362)	E-7 to E-9 (n = 320)	O-1 to O-3 (n = 221)	O-4 to O-6 (n = 223)
Permanent housing (32.7)	24.0	32.9	36.0	25.3	41.3
Language and cultural differences (26.4)	38.3	26.5	20.6	29.4	21.1
Spouse employment (25.2)	35.2	24.3	21.3	28.1	20.6
Working conditions (22.7)	21.4	20.2	29.4	24.4	16.6
Initial housing costs (21.2)	18.9	21.5	20.9	24.0	20.2
Medical/dental care (19.5)	19.9	19.1	19.4	20.4	19.3
Vehicles (19.3)	15.8	20.4	26.4	12.2	17.5
Temporary lodgings (18.5)	5.6	17.7	22.2	21.7	22.4
Shipping and storage of household goods (17.9)	8.7	16.6	16.6	22.2	26.0
Family adjustment (14.8)	14.8	12.2	15.3	16.3	17.0

In general, pay grade differences were not strong for most of the more frequently selected problem areas. The E-1 to E-3 and O-1 to O-3 pay grade groups were somewhat less likely than the other pay grade groups to choose permanent housing as a serious problem. The E-1 to E-3 groups was more likely than the other pay grade groups to have trouble with language and cultural differences and to see spouse employment as a serious

problem. The E-1 to E-3s were also less likely to select shipping and storage of household goods and temporary lodging as a serious problem (especially less so than the officers). The E-7 to E-9 group more often than most of the other pay grade groups reported working conditions and vehicles as among their most serious problems.

Individuals in government-owned housing selected the following problems more often than did those in government-leased or economy housing: vehicles, shipping and storage of household goods, temporary lodging, permanent housing, and family adjustment. Those in government-leased housing saw the following as serious problems more often than did those in government-owned or economy housing: shopping, recreation and entertainment, local telephone service, and temporary lodging. For those living in economy housing, initial housing costs, living expenses, and spouse employment were chosen more frequently than residents of government-owned or government-leased housing.

Service members with children in their household were more likely to report the following as one of their three most serious problems than those without children: permanent housing, child care, and schools. Those without children were more likely than those with children to select transportation, local telephone service, and spouse employment.

Several of the problems that were differentiated by household composition and type of housing were problems not reported by a higher than expected percentage (14% or more) of all the respondents. However, problems that were chosen more frequently by residents of government-owned housing were among those highly selected in the total sample. Problems dealing with money were of more concern to those in economy housing, while housing itself (both permanent and temporary) was more of a problem to residents of government-owned housing.

#### Reporting of the Most Serious Problem (Q140)

The first problem selected by the respondents was labelled "most serious." Table G-40 presents the problems most frequently selected as most serious for each Service. The data parallels that in Table G-37 where the three most serious problems were combined. Each of the 21 listed problems would be expected to average approximately 5 percent selection if choices had been made randomly or if each individual had problems unique and different from everyone else.

Permanent housing was the single most serious problem selected by a much greater than expected percentage. Outside the area of housing, working conditions, medical/dental care, and language and cultural differences were also frequently reported as the most serious problem encountered at the current location. Shipping and storage of household goods was a serious problem in the Army sample, while living expenses were a problem for the Air Force sample.

Table G-40  
"Most Serious" Problem for Each Service (Q140)

Problem	Army (%)	Air Force (%)
Permanent housing	14.9	16.7
Shipping and storage of household goods	10.0	--
Working conditions	10.0	10.0
Medical/dental care	9.0	6.9
Language and cultural differences	6.9	10.3
Living expenses	--	7.9

### IMPROVEMENTS NEEDED

Respondents were asked to select the four most important areas, from a list of 14 (Table G-41), that they believed needed improvement at their current location. The list included some areas that were also listed as problems (e.g., housing, medical care) and some new ones (e.g., exchanges, commissaries, parking facilities).

#### Overall Choices of Improvements Needed

If respondents had chosen randomly from the list, an average of 28 percent (4 choices in 14) would be expected for each alternative. Therefore, approximately 4 percent more or less than 28 percent selecting an area for improvement represents a statistically meaningful indication of choice or nonchoice of the areas listed.

Table G-41 shows the percentages of respondents in each Service who selected each of the 14 areas among their four choices.

In the Army over 60 percent of the sample selected family housing as one of the four most important areas needing improvement. This number was more than 20 percentage points greater than the second most frequently selected area for improvement, which was troop barracks. Other areas chosen to a greater than statistically expected degree were medical facilities, commissaries, and temporary lodging facilities. Areas least often selected as needing improvement were parking, child care, recreation, dental, and religious facilities.

The selection of troop barracks is somewhat surprising as almost none of the sample were presently living in barracks. It is possible that the condition of the barracks are poor and that this condition is very visible to those not living in them. In answering the question on improvements needed, many respondents may have been answering from the perspective of others (such as for personnel who work for them) rather than from a personal point of view.

Table G-41  
Choices of Improvements Needed (Q123-Q126)

Improvement Area	Army		Air Force	
	%	Rank	%	Rank
Family housing	61.7	1	55.3	2
Troop barracks, dorms	39.8	2	28.7	7
Medical facilities	38.0	3	38.6	3
Commissaries	36.2	4	36.9	4
Temporary lodging facilities	31.5	5	34.3	5
Work areas	30.8	6	32.6	6
Youth facilities	27.6	7	18.9	10
Exchanges	27.3	8	23.7	8
Parking facilities	27.0	9	56.8	1
Child care facilities	23.4	10	15.4	13
Family entertainment facilities	21.9	11	19.5	9
Recreation facilities	19.7	12	18.4	11
Dental facilities	10.4	13	16.5	12
Religious facilities	4.3	14	3.5	14

In the Air Force sample, choices were similar to those in the Army with the major exception that parking facilities were most frequently chosen for improvement, followed closely by family housing. From the write-in comments, parking space at the work sites appears to be a problem. Other areas chosen more frequently than would be expected statistically were medical facilities, commissaries, temporary lodging, and work areas. Troop barracks were much less frequently chosen than in the Army sample. Areas not frequently chosen as needing improvement were youth, child care, family entertainment, recreation, dental, and religious facilities.

Overall, housing appears to be a dominant concern of service members when compared to other aspects of military life.

Army Response Differences by Pay Grade Group, Type of Housing, and Household Composition

Table G-42 presents the percent of each pay grade group selecting each improvement by at least 28 percent of all the respondents. The percent next to each improvement area is the percent of all those responding who selected it among their four most important improvements needed.



Table G-42  
Improvements Needed by Pay Grade Group: Army

Improvement (% Overall)	Responses (%)					
	E-1 to E-3 (n = 91)	E-4 to E-6 (n = 298)	E-7 to E-9 (n = 416)	W-1 to W-4 (n = 475)	O-1 to O-3 (n = 472)	O-4 to O-6 (n = 547)
Family housing (61.7)	58.2	55.9	56.7	60.8	63.6	68.4
Troop barracks (39.8)	29.7	36.2	40.6	34.7	42.2	45.1
Medical facilities (38.0)	37.4	41.8	44.2	37.7	34.7	34.6
Commissaries (36.2)	40.7	44.0	42.7	37.9	32.6	28.2
Temporary lodging (31.5)	20.9	22.8	30.8	33.9	33.1	34.9
Work areas (30.8)	29.7	29.2	25.5	38.1	28.4	31.6

The junior enlisted group saw troop barracks needing improvement less often than did most of the other pay grade groups and, along with the E-4 to E-6 group, also selected temporary lodging less frequently among their most important areas for improvement. The E-4 to E-6 group chose family housing less often than did commissioned officers. The warrant officers were more concerned than the other pay grade groups with improvements in work areas. Commissioned officers were less concerned than were enlisted personnel with improvements in commissaries and medical facilities; and, more often than the lower graded enlisted groups, they believed that troop barracks needed improvement.

There were few areas for improvement in which the frequency of choice of one specific pay grade group differed to a great extent from each of the other groups. Family housing was selected most often by all pay grade groups, at least 10 percent more often than the second most frequently selected area for improvement. For each of the officer groups, family housing was at least 20 percentage points more frequently selected than the second most frequent choice.

In the Army sample, type of housing showed statistical relationships to 4 of the 14 areas needing improvement. Perhaps of most interest, residents of government-owned housing chose family housing as an area of needed improvement slightly more often than residents of economy housing, although all respondents selected family housing very often. Residents of government-owned and government-leased housing selected youth facilities as needing improvement more frequently than those in economy housing. Those in economy housing selected exchanges and work areas for improvement more frequently than residents of government housing.

The presence or absence of children in the household also affected the frequency of choice of some areas for improvement. Those with children selected youth facilities, child care, and family housing more frequently than those without children. Those without children selected exchanges, commissaries, and family entertainment facilities more frequently than those with children, which is somewhat surprising. It is possible that those without children were thinking of facilities for couples (e.g., movies).

#### Air Force Response Differences by Pay Grade Group, Housing Type, and Household Composition

Table G-43 presents the percent of each pay grade group selecting each improvement by at least 28 percent of all those responding.

Parking facilities was chosen among the four most important areas needing improvement by approximately the same percentage in each pay grade group. The E-1 to E-3 group selected family housing among the most important areas needing improvement less frequently than most other pay grade groups, and selected temporary lodging much less often than other pay grade groups. The E-4 to E-6 group was less concerned than the higher grades with improvements in temporary lodging. The E-7 to E-9 group, along with the O-4 to O-6 group, selected family housing more frequently than the other pay grade groups. The O-4 to O-6 group was less concerned with improvements to commissaries than the other groups and more concerned with improvements in temporary lodging. None of the pay grade groups differed from the others on more than two of the frequently selected improvement areas.

Table G-43

## Improvements Needed by Pay Grade Group: Air Force

Improvement (% Overall)	Responses (%)				
	E-1 to E-3 (n = 196)	E-4 to E-6 (n = 384)	E-7 to E-9 (n = 351)	O-1 to O-3 (n = 260)	O-4 to O-6 (n = 252)
Parking facilities (56.8)	59.2	56.3	56.7	56.9	55.6
Family housing (55.3)	43.4	55.1	62.7	48.8	61.5
Medical facilities (38.6)	39.8	41.7	36.5	40.0	34.5
Commissaries (36.9)	42.3	37.8	36.8	42.3	26.2
Temporary lodging (34.3)	15.8	29.4	36.2	39.2	48.4
Work areas (32.6)	28.6	32.6	36.8	30.4	32.5
Troop barracks (28.7)	25.0	28.4	31.3	23.5	33.7

Type of housing was statistically associated with frequency of choice on 7 of the 14 areas listed. Residents of government-owned and government-leased housing selected youth facilities and residents of government-owned housing selected family housing more frequently than service members in other housing types. In addition, government-owned housing residents selected work areas slightly more often than those in government-leased housing. Residents of government-leased or economy housing selected exchanges, commissaries, and family entertainment facilities more frequently. Residents of economy housing chose recreation facilities more often than those in government-leased housing.

Service members with children in their households chose youth facilities, child care facilities, and family housing more frequently than those without children. On the other hand, individuals without children more often selected exchanges, commissaries, recreational facilities and family entertainment facilities. With the exception of commissaries and family housing, the other areas showed a relatively low rate of selection by the entire sample.

For both Services, some of the relationships discovered between pay grade group, type of housing, and presence or absence of children in the household may be a function of other variables associated with these variables. For example, a much larger proportion of service members with children than those without children lived in government-owned housing; and the lower enlisted pay grade groups (E-1 to E-6) showed a higher proportion without children and living in economy housing than did the higher pay grade groups.

#### Choice of the "Most Important" Improvement Needed

Table G-44 shows the improvements selected most often as the single "most important" by Service. If the choice was made randomly or if there was no differentiation among the 14 areas listed, the average percentage of choice for each area would be approximately 7 percent.

Table G-44

**"Most Important" Improvement by Service (Q123)**

Improvement	Responses (%)	
	Army	Air Force
Family housing	28.4	28.5
Medical facilities	14.1	12.8
Troop barracks, dorms	13.6	--
Commissaries	8.2	9.0
Parking facilities	--	11.7

The areas selected as "most important" in terms of need for construction, expansion, leasing, or renovation to improve living conditions were similar in both Services. Family housing was the most frequent choice by a wide margin over the second most frequently selected area. In the Air Force, parking facilities and family housing were selected most often among the four most important areas, but family housing was selected as the most important well above parking facilities.

**POLICY PROPOSALS**

Service members were asked to respond to 10 proposals that would affect housing policies. The first six dealt with assignment to government family housing; the remaining four, with allowances and choices for residents of government housing. Respondents rated each of the 10 proposals on a 5-point scale ranging from strongly opposed to strongly favor, with the midpoint labelled undecided.

**Policy Proposals Affecting Government Housing Assignment**

Table G-45 shows the percentages of enlisted and officer respondents in favor of, undecided about, and opposed to the policy proposals. The strongly and somewhat categories of the favor-and-oppose responses have been combined for ease of presentation. The rank indicates the order of popularity in terms of the percentage favoring the proposal, combined across enlisted and officer responses.

Table G-45 shows differences between the Army and Air Force. A majority in both Services favored extending eligibility for government housing and constructing government housing specifically for the lower enlisted pay grades (E-1 to E-3 and E-4 with less than 2 years of service). Support for these proposals was substantially higher among Air Force respondents. Of those in favor of these two proposals, a large majority responded strongly favor versus somewhat favor.

Compared to those who did not indicate a preference to leave the Service, this group more frequently reported a problem with initial housing costs (21.1%) and with dependent transportation (21.3%).

This group's negativity was also seen in their reporting of living condition effects. They more often than the others perceived negative living condition effects on their job performance (47.6 versus 32.9%) and on their career intentions (45.7 versus 23.7%).

### Unaccompanied Respondents

Demographics. Less than 5 percent of the sample (4.9%) (n = 77) were unaccompanied. No differences were found in pay grade group distribution. More of the unaccompanied (60.1%) than those who were accompanied (8.4%) had changed marital status since arrival at the current installation. The unaccompanied respondents more often than did those who were accompanied (2.7%) reported children and/or relatives, not spouses (38.2%), as dependents. Almost all of this group (90.8%) were permanently unaccompanied.

Reasons for being Unaccompanied (Q24-Q26). Approximately equal percentages of the unaccompanied respondents wanted their dependents to accompany them (39.7%), had mixed feeling about it (30.1%), or preferred that their dependents remain in CONUS (30.1%). However, looking at the reasons given for being unaccompanied, they were not primarily personal preference. The percentage who were unaccompanied because of personal preference was only 13.6 percent. Over half (52.2%) indicated dependent-related or situational reasons, with the spouse's employment situation the most frequently reported reason. Over one-quarter reported reasons beyond their control (e.g., service member schedule and the high cost of relocation), while 6.8 percent did not specify their reasons.

Impact of being Unaccompanied on Job Performance (Q28). The majority (65.3%) of the unaccompanied reported that their status had no effect on their job performance, while 18.7 percent felt they were less effective and 16.0 percent felt they were more effective. Based on the 43 individuals who answered all of the items used in the analysis, the best predictors of perceived effect of the unaccompanied status on job performance were willingness to choose the present assignment over again and preference for being accompanied or unaccompanied ( $R = .44$ ). That is, those who were not willing to choose the present assignment over again and who had preferred to be accompanied were more likely to report a negative effect on their job performance as a result of their unaccompanied status. This should not, however, be considered a direct cause and effect relationship since the group included in the analysis was quite small.

Problems (Q140-Q142)/Improvements Needed (Q123-Q126). Combining all three choices of problems from the list of 21, the unaccompanied most frequently reported that they had problems with separation (43.6%), working conditions (32.7%), vehicles (30.9%), and language and cultural differences (27.3%). In their selections of areas needing improvement at the current installation, they most frequently chose troop barracks (69.7%), parking facilities (53.0%), work areas (39.4%), commissaries (36.4%), and family housing (34.8%).

Living Condition Impacts (Q137-Q139). A majority of the unaccompanied respondents reported no effect of living conditions on their job performance (52.0%) and career intentions (65.3%), and 56.0 percent indicated they would be willing to choose the present assignment over again, knowing what they know now about living conditions.

than married parents to report working conditions, living expenses, and child care as their most serious problems.

#### Comparisons by Spouse Nationalities

In the Air Force sample, 82.6 percent (n = 1,225) had U.S. born spouses, 7.1 percent (n = 105) local national spouses, and 10.3 percent (n = 153) other foreign national spouses. Local and other foreign nationals were most often married to service members in the E-4 to E-9 pay grade groups.

Respondents with local national spouses were the most satisfied overall (62.7%) with their residences, compared to those with U.S. born (43.8%) and other foreign national spouses (52.7%). Those with other foreign national spouses were least likely (35.8%) to be living in economy housing compared to those with U.S. born (52.3%) and local national spouses (56.9%). Other foreign national spouses were more often reported to be dissatisfied (43.3%) with their residences compared to local national spouses (32.4% dissatisfied) and U.S. born spouses (31.9% dissatisfied). In general, respondents with local national spouses reported greater usage of economy facilities (versus government) facilities than did others.

Respondents with local national spouses more often than others preferred to extend at the present location or do a second tour in Germany following completion of the current tour. Those with other foreign national spouses more often preferred to do a second overseas tour in a different foreign country. Those married to U.S. born spouses more often preferred to return to CONUS.

#### Respondents Accompanied by Nonsponsored Dependents

Only 1.9 percent (n = 28) of the sample were identified as having nonsponsored dependents with them. Over three-quarters were found in the E-1 to E-6 pay grade groups. Approximately 40 percent had married since arrival at the current location and 40.5 percent had changed marital status since arriving.

More of the respondents with nonsponsored dependents preferred government housing than were currently living in it. But more of the respondents with sponsored dependents preferred economy housing than were currently living in it. Nonsponsored spouses were more often reported (64.0%) as relying on the service member for transportation than were sponsored spouses (31.0%).

Negativity or uncertainty about making the military a career was more prevalent among those with nonsponsored dependents. Those with nonsponsored dependents were more likely to say they would prefer to leave the Service after completing the current tour than respondents whose dependents were sponsored. They also were more likely to report a negative effect of their living conditions on career intentions (50.0 versus 23.4% of those with sponsored dependents) and were less willing to choose the present assignment again (64.3 versus 39.5% of those with sponsored dependents).

#### Respondents Preferring to Leave the Service (Excluding Those Who Have Already Served 20 Years or More)

Individuals identified as preferring to leave the Service following completion of the current tour made up 6.4 percent (n = 82) of the sample. They were more often found in the E-1 to E-3 pay grade group, more often were female, and more often had no children.

were in favor of (40.3%) the proposal to construct housing for the lower-grade enlisted even if it meant delaying all other family housing construction. Similarly, approximately equal percentages were opposed to (40.5%) and in favor of (44.3%) the proposal to extend eligibility to the lower-grade enlisted members even if it meant increasing waiting times for everyone. A majority of the unaccompanied (64.8%) were opposed to retention of the current assignment procedures.

Of the choice-allowance proposals for occupants of government family housing, the unaccompanied were generally in favor of a maintenance and repair allowance (66.2%), allowing retention of some of the BAQ in exchange for living in a unit with fewer bedrooms (62.0%), and a utility allowance (50.7%). They were generally opposed (52.2%) to the proposal allowing additional payment beyond the BAQ to live in a housing unit with more bedrooms than they were qualified to have.

### Air Force

The number of individuals that were identified as belonging to one or another of the special groups in the Air Force sample was generally small in all cases. Again, the items that were used to identify these groups were not answered by all the respondents. As a result, the samples on which they are based vary widely.

#### Accompanied Female Service Members

Only 5.5 percent (n = 83) of the sample were identified as accompanied female service members. Over half of these (53.0%) were in the E-4 to E-6 pay grade group with significant underrepresentation in the E-7 to E-9 and O-4 to O-6 groups. Compared to 6.6 percent of the accompanied males, 40.2 percent of the accompanied female service members had changed marital status since arriving at the current location. Over one-third (36.6%) had children and relatives as dependents (but no spouse), compared to 0.7 percent of males; and 23.2 percent of the females were members of dual career couples (compared to 1.8% of the males).

Approximately the same percentage of females and males reported living in economy housing and preferring to live in economy housing. Females were, however, more likely to be sharing living expenses with persons other than their dependents (13.9% compared to 2.7% of males). Male service members were more likely to report dependent transportation problems than females.

Female service members were more likely to be negative or undecided about making the military a career than were males. They more often than males reported having problems with child care and language and cultural differences. They more often than males selected child care facilities as needing improvement. Nearly one-quarter (21.6%) of the female service members reported not having a sponsor.

#### Accompanied Single Parents

A very small percentage of the sample (3.4%, n = 40) were identified as single parents. They were more frequently found in the E-4 to E-6 pay grade group. Three-quarters of the group was female, and 72.5 percent were divorced, widowed, or separated.

Single parents were more likely than married parents to report a negative effect of their living conditions on career intentions (35.0 versus 22.3%). They were more likely

remaining 20.5 percent reported they were more effective as a result of being unaccompanied. The best predictors of service member perception of the impact of their status on their job performance, in the order of their importance, were whether or not they preferred to be accompanied, their overall satisfaction with their residence, and whether or not they would choose the present assignment again ( $R = .53$ ). That is, perception of negative impacts on job performance due to being unaccompanied were found mostly in individuals who wanted their dependents to accompany them, who were dissatisfied with their residence, and who were unlikely to choose the present assignment again. Middle (neutral) or positive responses to these items then would be associated with perceptions of no impacts or positive impacts of the unaccompanied status on job performance. It should be noted, however, that only 111 of the unaccompanied respondents answered all of the items used in the analysis above. The relationships found are only moderate and do not represent the entire unaccompanied group.

Problems (Q140-Q142)/Improvements Needed (Q123-Q126). With respect to their current residences, the unaccompanied showed more dissatisfaction than satisfaction with the following aspects of their residences: overall size, bedroom size(s), adequacy of the laundry facilities, availability and quality of government furniture, water purity, and convenience of the residence to major medical facilities. Overall, 40.7 percent said they were dissatisfied with the comfort and adequacy of their residence, 8.3 percent were neutral, and 51.0 percent were generally satisfied.

Approximately one-half (49.7%) of the unaccompanied reported having no sponsor compared to 15.5 percent of the accompanied.

From the list of 21 problems encountered at the current location, the unaccompanied most frequently selected separation and related problems (60.7%), working conditions (28.1%), language and cultural differences (25.8%), and permanent housing (24.2%). Asked to select from a list of 14 areas that they felt needed improvement at their installation, the unaccompanied most frequently selected troop barracks (60.5%), family housing (42.9%), work areas (40.0%), medical facilities (36.1%), and commissaries (34.8%).

Living Condition Impacts (Q137-Q139). Compared to the accompanied service members, the unaccompanied more often reported that their living conditions had a negative effect on their job performance (41% compared to 25% accompanied) and on their career intentions (47% compared to 30% of the accompanied). Results of the analyses to predict these responses among the unaccompanied produced only modest relationships. That is, service member overall satisfaction with the residence and the number of months spent at the installation were moderately related to their perception of living condition impacts on job performance ( $R = .42$ ). Similarly, the number of months spent at the current installation, their general career intentions, and their perception of the effect of being unaccompanied on job performance related weakly ( $R = .38$ ) to their perceived living condition impact on career intentions. Again, the number of respondents answering all of the items was low ( $n = 111$ ); so the relationships should only be considered as indications, not as direct causes and effects.

Policy Proposals (Q127-Q136). The unaccompanied service members' responses to the policy proposals were very similar to those from the accompanied service members. With respect to those proposals that would affect family housing assignment, the unaccompanied respondents generally favored the unconditional extension of eligibility for the lower-grade enlisted (62.8% in favor), assignment on the basis of bedroom requirement only (68.2% in favor), and construction of family housing specifically for the lower-grade enlisted members (63.6%). Approximately equal percentages were opposed to (41.7%) and



transportation or to rely on friends than sponsored spouses (11.5%). Fewer nonsponsored spouses (44.9%) were reported to drive themselves than were sponsored spouses (71.3%).

Respondents with nonsponsored dependents more often reported serious problems with working conditions (17.2%), language and cultural differences (10.3%), and permanent housing (10.3%), compared to those with sponsored dependents who chose permanent housing (15.0%) and shipping and storage of household goods (10.2%). Service members with nonsponsored dependents were more likely to report (40.6%) negative effects of their living conditions on their career intentions than those whose dependents were sponsored (24.8%), and they were more unwilling to choose the present assignment again (49.2% negative, compared to 33.9% of those with sponsored dependents).

#### Respondents Preferring to Leave the Service (Excluding Those Who Have Already Served 20 Years or More)

The Army sample was generally career motivated. Only 5.8 percent (n = 128) reported a preference for leaving the Service following completion of the current tour. These individuals were most often found in the E-1 to E-6 pay grade groups and frequently were unaccompanied. They more often lived in economy housing (42.6%) than those not preferring to leave the Service (21.8%) and reported their most serious problem to be working conditions (16.4% compared to 9.6% of those not preferring to leave). Negative preferences regarding staying in the Service were also associated with greater reporting of negative living condition effects on job performance (46.4%) and on career intentions (48.0%) than found among those who were more career motivated (31.6 and 25.9% respectively).

#### Unaccompanied Respondents

Demographics. Nine percent (n = 240) of the sample were identified as unaccompanied. Over twice as many of the unaccompanied respondents were enlisted (all pay grades) than officers. The unaccompanied had more often changed their marital status since arrival at the current installation (21.6%) than the accompanied (3.9%). Eighty-two percent were permanently unaccompanied. Over half (59.6%) reported living in barracks, but 48.2 percent preferred to live in economy housing. Barracks living generated consistently higher levels of dissatisfaction with aspects of housing than did living in the local economy.

Reasons for Being Unaccompanied (Q24-Q26). A majority (54.6%) of the unaccompanied preferred that their dependents be with them at the current installation, while 18.5 percent had mixed feelings and 26.9 percent preferred that their dependents remain in CONUS. This preference for being unaccompanied, however, was not consistently the service member's personal preference. Asked their reasons for being unaccompanied, only 12.0 percent said it was their personal preference; 39.8 percent reported reasons beyond their control (e.g., service member schedule, the high cost of relocation, dependents not command sponsored, etc.); and 54.6 percent gave dependent-related and situational reasons (e.g., spouse job, dependents settling at the last duty location, settlement of personal affairs, etc.). The remaining 6.4 percent did not specify their reasons for being unaccompanied.

Impact of Being Unaccompanied on Job Performance (Q28). High percentages of the unaccompanied respondents reported that their unaccompanied status had no effect on their job performance (42.7%) or that they were less effective in their jobs (36.8%). The

Female service members were more likely than males to be negative or undecided about making the military a career. They were more likely to be living in economy housing, and more often than males reported problems with initial housing costs. Females were more likely than males to be sharing living expenses with persons other than their dependents. Like their male counterparts, they selected family housing as the most important improvement needed. Their second choice was barracks, compared to the second choice of medical facilities among males. Unlike their male counterparts, they more often reported their most serious problems to be working conditions, temporary housing, and language and cultural differences (15% selection for all three), while males reported permanent housing (15.0%) and shipping and storage of household goods (10.1%).

#### Accompanied Single Parents

Approximately one percent (n = 22) of the sample was identified in this special group. They were more prevalent in the enlisted pay grades than among officers and they were more often female than male.

#### Comparisons by Spouse Nationalities

In the Army sample, 81.8 percent (n = 1,948) of the spouses were U.S. born, 9.9 percent (n = 236) were local nationals, and 8.3 percent (n = 198) were other foreign nationals. Local and other foreign national spouses were most often found among the E-7 to E-9 and W-1 to W-4 pay grade groups.

Spouse reliance on the service member for transportation (as opposed to using public transportation, riding with friends, or driving one's self) was highest among the other foreign nationals, followed by local national spouses, and lowest among U.S. born spouses. Service members with local national spouses more often than the others lived in and preferred to live in economy housing. They also more often lived in communities with few or no other Americans and reported significantly greater usage of economy facilities (versus government facilities).

Service members with local national spouses were more likely than the others to prefer extensions or second tours in Germany. Those with other foreign national spouses more often preferred second overseas tours in a different foreign country. Those with U.S. born spouses more often preferred to return to CONUS following completion of the current tour.

#### Respondents Accompanied by Nonsponsored Dependents

This special group made up 2.5 percent (n = 59) of the sample. They were most often found in the E-1 to E-6 pay grade groups, and 11.9 percent had married since their arrival at the current installation (compared to 2.0% of those with sponsored dependents). Their household composition was more often service member and spouse only (23.7%) than those with sponsored dependents (5.4%). More of the nonsponsored spouses were reported to be unemployed and looking for work (40.4%) than were sponsored spouses (17.7%).

Nearly all of the service members with nonsponsored dependents reported living in economy housing. Their preferences for type of housing were similar to those whose dependents were sponsored. Somewhat more overall dissatisfaction with the current residence was reported among sponsored spouses (37.5%) than among nonsponsored spouses (26.5%). Greater dependent transportation problems were reported among those with nonsponsored dependents. More nonsponsored spouses (38.8%) were reported to use public

56.3% opposed). By individual pay grade group, the O-1 to O-3 respondents were significantly more in favor of the proposal than the E-1 to E-3 and E-7 to E-9 groups. However, all pay grade group means were on the negative side of the response scale (2.1 to 2.6). No differences were found by current housing type or household composition.

Proposal 10 (Q136): Allow Service Members to Retain Not More Than 25 Percent of Their BAQ For Living in Housing Units With Fewer Bedrooms Than They Are Qualified to Have.

Army

This was the most popular of the four choice-allowance proposals (enlisted 64.5% in favor, officers 67.4% in favor). By individual pay grade groups, only the W-1 to W-4 respondents were significantly more in favor of the proposal than the E-4 to E-6 group. All pay grade group means were on the positive side of the response scale (3.4 to 3.7). Residents of government-owned housing were more in favor than those in economy housing. No differences were found by household composition (i.e., with or without children).

Air Force

Among Air Force respondents, this was the second most popular of the four choice-allowance proposals among the enlisted (60.9% in favor) and the most popular among the officers (65.0% in favor). All pay grade group means were on the positive side of the scale (3.0 to 3.6), with the E-1 to E-3 group the least in favor. No differences were found by current housing type. Respondents with children were more in favor of the proposal than those without children.

## **SPECIAL GROUPS**

Army

As shown in Table G-8, small numbers of respondents in the Army sample fell into the special groups designations. The largest percentages were found in respondents married to local nationals and those who were unaccompanied. Sample sizes vary widely as a function of the items used to define the special groups. As not all respondents answered the items that were used for the definitions, the number comprising the total sample for each group also varies widely.

Accompanied Female Service Members

The total sample consisted of only 1.7 percent (n = 41) accompanied female service members. Full analysis on this group was not performed due to the small number.

They were overrepresented in the E-1 to E-6 pay grade groups, and underrepresented in the W-1 to W-4 and O-4 to O-6 groups. They had changed their marital status since arriving at the duty station more often than their male counterparts, and were more often members of dual career couples or single parents than were males. Fewer accompanied female service members than male service members had civilian spouses who were unemployed and looking for work.

significantly more in favor of the proposal than those in government-owned and government-leased housing. Respondents without children favored the proposal more than those with children.

#### Air Force

Air Force personnel also ranked this proposal third out of the four involving choice-allowances. The enlisted respondents were 53.1 percent in favor; the officers were 57.4 percent in favor. No differences were found by individual pay grade group. All group mean responses were on the positive side of the response scale (3.2 to 3.3), except for the E-1 to E-3 respondents (2.9). Residents of economy housing were more in favor of the proposal than those living in government-owned housing. No differences were found by household composition (i.e., with or without children).

Proposal 8 (Q134): Provide a Reasonable Allowance to Occupants for Doing Selected Minor Repairs and Maintenance on Their Units, Over and Above What Would Normally be Expected of Them.

#### Army

This was the second most popular of the four choice-allowance proposals for both enlisted respondents (61.9% in favor) and officers (58.2% in favor). No differences were found by individual pay grade group; all mean responses were on the positive side of the 5-point scale (3.2 to 3.6). Residents of economy housing were more in favor of the proposal than those in government-owned housing. No differences were found by household composition (i.e., with or without children).

#### Air Force

This was the most popular of the choice-allowance proposals among the enlisted respondents (69.3% in favor) and the second most popular among the officers (62.9% in favor). The E-4 to E-6 group was significantly more in favor of the proposal than all other pay grade groups; however, all group means fell on the positive side of the 5-point scale (3.3 to 3.7). Residents of economy and government-leased housing were significantly more in favor than those in government-owned housing. No differences were found by household composition (i.e., with or without children).

Proposal 9 (Q135): Allow Service Personnel to Get Housing Units With More Bedrooms Than They Are Qualified to Have if They Pay an Additional Amount of Not More Than 25 Percent of Their BAQ.

#### Army

This was the least popular of the choice-allowance proposals for both enlisted respondents (27.7% in favor, 58.6% opposed) and officers (32.7% in favor, 55.8% opposed). No differences were found by individual pay grade groups; all pay grade group means were on the negative side of the 5-point response scale (2.2 to 2.5). No differences were found as a function of current housing type or household composition.

#### Air Force

Like the Army sample, this was the least popular of the choice-allowance proposals among Air Force enlisted (24.6% in favor, 63.2% opposed) and officers (33.7% in favor,

Table G-46  
Responses to Policy Proposals Affecting Allowances for Government Housing (Q133-Q136)

Proposal	Army (%)						Air Force (%)							
	Rank	In Favor		Undecided		Opposed	Rank	In Favor		Undecided		Opposed		
		Enl.	Off.	Enl.	Off.	Enl.	Off.	Enl.	Off.	Enl.	Off.	Enl.	Off.	
Q133: Provide an annual utility allowance (based on family size, housing size, and location) allowing retention of any amount not spent on utilities and requiring out-of-pocket payment for any amount over the allowance.	3	48.0	48.6	14.7	13.0	37.3	38.4	3	53.1	57.4	17.7	12.3	29.1	30.3
Q134: Provide a reasonable allowance to occupants for doing selected minor repairs and maintenance on their units over and above what would normally be expected of them.	2	61.9	58.2	14.4	14.2	23.7	27.6	1	69.3	62.9	14.5	14.9	16.3	22.2
Q135: Allow service members to get housing with more bedrooms than they are qualified to have if they pay an additional amount of not more than 35 percent of their BAQ.	4	27.7	32.7	13.7	11.4	58.6	55.8	4	24.6	33.7	12.2	10.1	63.2	56.3
Q136: Allow service members to retain not more than 25 percent of their BAQ for living in housing units with fewer bedrooms than they are qualified to have.	1	64.5	67.4	12.7	9.9	22.9	22.7	2	60.9	65.0	17.0	13.1	22.1	21.9

Proposal 6 (Q132): Make no Change to the Existing Assignment Procedures for Government Family Housing.

Army

This proposal was the least popular of the six assignment proposals among the enlisted respondents (27.5% in favor, 57.2% opposed) and was ranked fourth by the officers (29.7% in favor, 50.2% opposed). The senior enlisted (E-7 to E-9) and all officer groups were significantly more in favor of it than the E-1 to E-3 respondents. However, no pay grade group mean was on the positive side of the 5-point scale (1.7 to 2.6). Residents of both government-owned and government-leased housing were more in favor of retaining the current policy than those living in economy housing. Respondents with children favored the proposal more than those without children.

Air Force

Air Force respondents were clearly the most opposed to retention of the current assignment policy (enlisted, 13.9% in favor, 75.4% opposed; officers, 22.2% in favor, 61.9% opposed). The E-1 to E-3 respondents were more opposed than all other pay grade groups; however, no group mean was on the positive side of the 5-point response scale (1.3 to 2.5). Residents of economy housing were significantly more opposed than those in government-owned or government-leased housing. Respondents without children were more opposed than those with children.

Policy Proposals Affecting Allowances for Government Housing

The four proposals to be discussed dealt with allowances and payments as a function of occupant choices and behavior. Table G-46 presents the distribution of responses by enlisted and officers. Popularity rankings of each proposal are based on combined enlisted and officer responses.

In both services, the majority of respondents were in favor of proposals that would provide them an allowance for repair and maintenance work and that would allow them to choose to live in units with fewer bedrooms. The majority were opposed to the proposal allowing payment in addition to BAQ for housing units with more bedrooms. Close to one-half were in favor of the utility allowance proposal.

In the discussion of each proposal that follows, the group means (average responses) are considered negative if they fall below 3.0 (i.e., on the oppose side of the response scale) and positive if they are over 3.0 (i.e., on the favor side of the scale). Household composition is defined here as with or without children.

Proposal 7 (Q133): Provide an Annual Utility Allowance (Based on Family Size, Housing Size, and Location) Allowing Retention of Any Amount Not Spent on Utilities and Requiring Out-of-pocket Payment for Any Amount Over the Allowance.

Army

This proposal was ranked third among the four choice-allowance proposals, with 48.0 percent of the enlisted respondents and 48.6 percent of the officers in favor of it. No differences were found by individual pay grade group. Of the six groups, only the warrant officers and O-4 to O-6 officers showed response means on the negative side of the 5-point response scale (2.7 to 2.9). By housing type, residents of economy housing were

Proposal 4 (Q130): Construct Family Housing for Personnel (With Dependents) in Pay Grades E-1 to E-3 and E-4 (2 Years or Less Service), Even if it Delays Construction of All Other Government Family Housing.

Army

This proposal ranked fifth in popularity out of the six proposals among both the enlisted (31.7% in favor, 56.3% opposed) and the officer respondents (25.7% in favor, 63.7% opposed). Overall, only the E-1 to E-3 responses fell on the positive side of the scale (3.2), and they were significantly more in favor of the proposal than all other pay grade groups (means = 2.1 to 2.4). By housing type, residents of economy housing were significantly more in favor of the proposal than those in government-owned housing. Respondents without children favor the proposal more than those with children.

Air Force

Like the Army sample, Air Force personnel rated this proposal fifth in popularity out of the six assignment proposals (enlisted, 44.7% in favor, 42.0% opposed; officers, 40.8% in favor, 47.6% opposed). By individual pay grade group, the E-1 to E-3 respondents were more in favor than the senior enlisted and both officer groups. The E-4 to E-6 respondents were more in favor than the senior enlisted and senior officer groups. Overall, the mean responses by groups showed only the E-1 to E-6 respondents on the positive side of the scale (3.1 to 3.3). By housing type, residents of both government-leased and economy housing favored the proposal more than those living in government-owned housing. No differences were found by household composition (i.e., with or without children).

Proposal 5 (Q131): Extend Eligibility for Government Family Housing to Personnel (With Dependents) in Pay Grades E-1 to E-3 and E-4 (2 Years or Less Service), Even if Time on the Waiting List Increases for Everyone Else.

Army

Enlisted respondents ranked this proposal fourth in popularity among the six concerned with housing assignment (32.0% in favor, 57.2% opposed), while officers rated it as the least popular (25.3% in favor, 64.5% opposed). The E-1 to E-3 group was significantly more in favor of the proposal than all other pay grade groups, as well as the only group whose mean response score was positive (3.3). Residents of economy housing were more in favor of the proposal than were those living in both government-owned and government-leased housing. Respondents without children were more in favor of the proposal than those with children.

Air Force

Air Force respondents ranked this proposal fourth in popularity (enlisted, 55.5% in favor; officers, 49.9% in favor). E-1 to E-3 and E-4 to E-6 respondents were most in favor of the proposal, with their responses significantly more positive than the senior enlisted and senior officers. The E-1 to E-6 and O-1 to O-3 group means were the only ones on the positive side of the 5-point response scale (3.1 to 3.7). Residents of economy housing were significantly more in favor of the proposal than those in government-owned housing. No differences were found between service members in households with and without children.

Proposal 2 (Q128): Assign Government Family Housing Solely on the Basis of Bedroom Requirements, but Retain Designated Officer and Enlisted Housing.

Army

This proposal was the most popular among Army personnel, with the enlisted 56.9 percent in favor and the officers 73.0 percent in favor. By pay grade, all three officer groups (W-1 to W-4, O-1 to O-3, O-4 to O-6) were more in favor than the E-4 to E-6 respondents; O-1 to O-6 respondents were more in favor than E-7 to E-9 respondents, warrant officers were more in favor than E-1 to E-3 respondents; and warrant officers and O-1 to O-3 respondents were more in favor than O-4 to O-6 respondents. Overall, the mean response for all pay grade groups was on the positive side of the scale (3.1 to 4.1). No differences were found by housing type. Respondents with children were more in favor of the proposal than those without children.

Air Force

This proposal was rated fourth out of six in popularity by the enlisted respondents (50.6% in favor) and third among the officers (68.0% in favor). The two pay grade groups most in favor of the proposal were the O-1 to O-3 and O-4 to O-6 respondents. They were significantly more in favor than were the E-1 to E-3 groups. Additionally, the O-1 to O-3 respondents were more in favor of the proposal than the other two enlisted groups (E-4 to E-6, E-4 to E-9). The mean responses for all pay grade groups were positive (3.1 to 3.6), with the exception of the E-1 to E-3s (3.0). No response differences were found by housing type. Respondents with children favored the proposal more than those without children.

Proposal 3 (Q129): Construct Family Housing for Personnel (With Dependents) in Pay Grades E-1 to E-3 and E-4 (2 Years or Less Service).

Army

This proposal ranked third in popularity among the enlisted respondents (55.9% in favor) and second among the officers (50.7% in favor). By pay grade group, the E-1 to E-3 respondents were significantly more in favor of the proposal than all other groups. Overall, all mean pay grade group responses were positive (3.1 to 3.9) except the O-4 to O-6 respondents (3.0). By housing type, residents of economy housing were significantly more in favor of the proposal than those living in government-owned housing. No difference was found between respondents with and without children.

Air Force

This proposal was the second most popular of the six concerned with housing assignment among both the enlisted (70.7% in favor) and the officer respondents (68.1% in favor). As in the Army sample, the E-1 to E-3 respondents were significantly more in favor of the proposal than all other pay grade groups. For all groups, the mean responses fell on the positive side of the 5-point scale (3.5 to 4.3). By housing type, residents of both government-leased and economy housing favored the proposal more than those living in government-owned housing. No differences were found by household composition (i.e., with or without children).



Both Services also showed a majority in favor of assigning family housing only on the basis of bedroom requirements, with separate enlisted and officer housing. Respondents in the Army were more in favor of this proposal than those in the Air Force. However, when the proposals to extend eligibility and to construct housing specifically for those currently ineligible were presented with potential negative consequences, support declined sharply in both Services. The decrease in the percentage in favor was about 20 to 25 percentage points. A majority of the Air Force respondents (54%) still favored extension of eligibility accompanied by an increase in waiting time for everyone, but in the Army sample only 28 percent remained in favor. Despite the hypothetical delay in construction of all other government family housing, approximately equal percentages of Air Force respondents were in favor of and opposed to construction of housing for those who are currently not eligible (44 and 43% respectively).

Respondents in both Services were against a policy of no change in assignment procedures for government family housing, with stronger opposition in the Air Force than in the Army (71 to 53% opposed).

Differences between the Services may be partly a function of the different distributions of pay grades within each Service. The Air Force sample has a higher percentage of E-1 to E-6s than the Army sample. About 20 percent of the Army sample is made up of warrant officers, while there are none in the Air Force sample.

In the discussion of each proposal that follows, the group means (average responses) are considered negative if they fall below 3.0 (i.e., on the oppose side of the response scale) and positive if they are over 3.0 (i.e., on the favor side of the scale). Household composition is defined here as with or without children.

Proposal 1 (Q127): Extend Eligibility for Assignment to Government Family Housing to All Service Members With Dependents, Regardless of Pay Grade.

Army

This proposal was the second most popular of the six assignment proposals among the enlisted (56.7% in favor) and the third in popularity among the officers (50.0% in favor). By pay grade group, the E-1 to E-3 respondents were significantly more in favor than the E-7 through O-6 groups. Similarly, the E-4 to E-6 group was significantly more in favor than the E-7 to E-9, W-1 to W-4, and O-4 to O-6 groups. Overall, the E-1 to E-6 and O-1 to O-3 responses were on the positive side of the scale (4.0, 3.4, and 3.1 respectively), while the other pay grade group means were slightly negative (2.8 to 2.9). By housing type, residents of economy housing were more in favor of the proposal than residents of government-owned housing. No differences were found by household composition (i.e., with or without children).

Air Force

Among Air Force respondents, this proposal was the most popular of the six affecting assignment policy. The enlisted were 76.6 percent in favor; the officer, 69.4 percent in favor. By pay grade group, the E-1 to E-6 groups were significantly more in favor than all other pay grade groups. Overall, the mean responses for all pay grade groups were on the positive side of the 5-point scale (3.4 to 4.5). By housing type, residents of economy housing were significantly more in favor of the proposal than those living in government-owned housing. No differences were found by household composition (i.e., with or without children).

Table G-45

## Responses to Policy Proposals Affecting Assignment to Government Housing (Q127-Q132)

Proposal	Rank	Army (%)						Rank	Air Force (%)					
		In Favor			Undecided				In Favor			Undecided		
		Enl.	Off.	Enl.	Off.	Enl.	Off.		Enl.	Off.	Enl.	Off.	Enl.	Off.
Q127: Extend eligibility for assignment to government family housing to all service members with dependents, regardless of pay grade	3	56.7	50.0	7.0	8.2	36.3	41.8	1	76.6	69.4	6.3	9.8	17.1	20.8
Q128: Assign government family housing solely on the basis of bedroom requirements, but retain designated officer and enlisted housing.	1	56.9	73.0	12.1	6.5	31.1	20.5	3	50.6	68.0	15.4	7.1	34.0	24.9
Q129: Construct family housing for personnel (with dependents) in pay grades E-1 to E-3 and E-4 (2 years or less service).	2	55.9	50.7	9.3	10.8	34.8	38.5	2	70.7	68.1	8.6	10.7	20.6	21.1
Q130: Construct family housing for personnel (with dependents) in pay grades E-1 to E-3 and E-4 (2 years or less service), even if it delays construction of all other government family housing.	5.5	31.7	25.7	12.1	10.5	56.3	63.7	5	44.7	40.8	13.3	11.6	42.0	47.6
Q131: Extend eligibility for government family housing to personnel (with dependents) in pay grades E-1 to E-3 and E-4 (2 years or less service), even if time on the waiting list increases for everyone else.	5.5	32.0	25.3	10.8	10.1	57.2	64.5	4	55.5	49.9	10.1	10.6	34.4	39.5
Q132: Make no change to the existing assignment procedures for government family housing.	4	27.5	29.7	15.3	20.1	57.2	50.2	6	13.9	22.2	10.7	15.9	75.4	61.9

Based on the 44 individuals who answered all of the items used in the analysis, the best predictors of the effect of living conditions on job performance were, in order of their importance, the perceived effect of the unaccompanied status, service member overall satisfaction with the residence, and whether or not the service member wished to be accompanied ( $R = .45$ ). That is, individuals who perceived their unaccompanied status to have a negative effect on their job performance, who were dissatisfied overall with their residences, and preferred to be accompanied were more likely to report a negative effect of their living conditions on job performance. The middle (neutral) or positive responses to these items then would be associated with responses of no effect or a positive effect of living conditions on job performance.

Similarly, the best predictors of perceived living condition effect on career intentions were, in order of importance, service member overall satisfaction with the residence, whether or not he/she wished to be accompanied, pay grade level, and number of months spent at the site ( $R = .38$ ). This level of prediction, however, is very low. With respect to willingness to choose the present assignment again, the best predictors were service member overall satisfaction with the residence, number of months left in the tour, and the perceived effect of being unaccompanied on job performance ( $R = .62$ ).

Policy Proposals (Q127-Q136). Regarding the proposals that would affect government family housing assignment, the unaccompanied respondents were highly in favor of the unconditional extension of eligibility to the lower enlisted pay grades (78.3%) and construction of housing specifically for the lower pay grades (75.7%). They were also moderately in favor of assignment on the basis of bedroom requirement only (51.4%) and extension of eligibility for the lower graded enlisted even if time on the waiting list increased for everyone (52.1%). They were split (45.7% in favor and 32.8% opposed) in response to the proposal to construct housing specifically for the lower graded enlisted with the potential impact of delaying all other family housing construction. Least popular of these six proposals was retention of the current assignment procedures (73.0% opposed).

On the choice/allowance proposals, the unaccompanied respondents were moderately in favor of the utility allowance (54.5%), the maintenance allowance (53.3%), and the proposal to allow government housing occupants to retain part of their BAQ in exchange for living in a unit with fewer bedrooms than they were qualified to have (57.4%). They were also generally opposed (58.0%) to the proposal allowing payment beyond the BAQ in exchange for a housing unit with more bedrooms than the resident was qualified to have.

## PERCEIVED EFFECTS OF LIVING CONDITIONS

One of the long range purposes of this and similar studies is to assess the effects of living conditions on military readiness and retention. The survey did not directly measure readiness or retention. However, in order to obtain information related to these topics, the questionnaire asked the respondents to evaluate the effects of living conditions (defined as housing, support facilities, costs, transportation, etc.) on this tour on their job performance and military career intentions. In addition, respondents were asked if they would choose their present assignment over again, in light of the living conditions. Job performance may be considered as one component of readiness, and career intention, as an indicator of potential retention.

Table G-47 presents service members' perceptions of the effects of living conditions. The very and somewhat, and the definitely and probably responses were combined for ease in presentation of the data.

Table G-47

## Responses to Living Condition Effects Questions (Q137-Q139)

Question	Army (%)		Air Force %		Total	
	Enlisted	Officer	Enlisted	Officer	Enlisted	Officer
Q137. Which best describes the effect that living conditions on this tour have had on your job performance?	(n = 826)	(n = 1564)	(n = 975)	(n = 536)	(n = 1801)	(n = 2100)
Negative	32.9	28.6	34.1	28.4	33.5	28.6
No effect	44.9	39.9	47.0	36.8	46.0	39.1
Positive	22.2	31.5	19.0	34.9	20.4	32.4
Q138. Which best describes the effect that living conditions on this tour have had on your military career intentions?	(n = 824)	(n = 1563)	(n = 975)	(n = 535)	(n = 1799)	(n = 2098)
Negative	27.3	24.1	28.8	14.8	28.1	21.7
No effect	52.9	54.8	58.3	63.9	55.8	57.1
Positive	19.8	21.1	12.9	21.3	16.1	21.2
Q139. Relative to living conditions, if you had a choice and you had it to do over, would you choose your present assignment?	(n = 825)	(n = 1558)	(n = 975)	(n = 534)	(n = 1800)	(n = 2092)
No	46.2	27.9	37.4	17.2	41.4	25.1
Unsure	9.5	7.8	10.9	6.7	10.2	7.5
Yes	44.4	64.4	51.7	76.0	48.3	67.4

The majority in both Services (57 to 58%) reported an effect of living conditions on their job performance. A slightly higher percentage of those reporting an effect saw it as negative rather than positive, with almost no difference in the Army sample and a 7 percent difference in the Air Force.

The majority in both Services (54 to 60%) perceived no effect of living conditions on their military career intentions. However, a substantial minority of the respondents did report an effect (46% in the Army and 40% in the Air Force). Of those reporting an effect, a majority reported the effect as negative in each service. Majorities in both Services (58 to 61%) said they would probably or definitely choose their present assignment again if they had the choice. Thirty to 34 percent said they would definitely or probably not choose their present assignment again.

#### Differences by Pay Grade, Housing Type, and Household Composition

##### Army

Pay grade group was statistically related to each of the three questions assessing the perceived effect of living conditions. Senior officers were somewhat more positive in their average ratings of effects on job performance and especially more positive than the E-4 to E-9 groups. Lower-grade enlisted personnel (E-1 to E-6) were less likely than the other pay grade groups to report that living conditions had no effect on their job performance. With regard to effects on military career intentions, differences in average ratings were small among the pay grade groups, with the junior enlisted group being slightly more negative. All of the pay grade groups had high average ratings close to the midpoint of the scale (i.e., no effect). Again, the lower-grade enlisted personnel were somewhat less likely to report no effect of their living conditions on their career intentions. Pay grade group was directly related to ratings of willingness to choose the present assignment again. The average rating increased as a function of pay grade group with the officers more willing than the enlisted respondents.

Housing type was not related to perceived effects of living conditions on job performance or to military career intentions. Occupants of government-owned housing were slightly more willing than residents of economy housing to choose their present assignment again.

Presence or absence of children in the home was not related to ratings of effects of living conditions on job performance or to military career intentions. Service members with children were slightly more willing to choose their present assignment again.

##### Air Force

Pay grade group showed a consistent relationship to all three effects of living conditions. Average ratings showed officers to be more positive on all three effects than enlisted personnel. Senior level officers were more positive in their average rating of the effects of living conditions on job performance than the enlisted pay grade groups. Similar results were found for effects of living conditions on military career intentions and willingness to choose the present assignment over again. For all three effects, the junior officers also showed reliably more positive average ratings than did E-1 to E-6 enlisted people. The strongest differences were found for the effects of living conditions on willingness to choose the present assignment again. The officers were more positive than the enlisted groups and the senior enlisted group was more positive than the other enlisted respondents.

Type of housing was not related to perceived effects of living conditions, except for a very slight effect on job performance where residents of economy housing were more positive. The average rating for all housing types, however, were close to the midpoint of the scale (i.e., no effect).

Respondents without children in their household were slightly more positive in their ratings of the effects of living conditions on job performance, although the average ratings for both groups were very close to the midpoint (i.e., no effect). Presence or absence of children was not related to the other two perceived effects of living conditions.

### Explaining the Perceived Living Condition Effects

In order to obtain information on the factors that may be related to service members' perception of the effects of living conditions, several variables were selected for inclusion in multiple regression analyses. These variables included demographic characteristics, time factors, perceived effects and satisfaction with temporary housing, satisfaction with referral and assignment services, helpfulness of the housing office, characteristics of the permanent residence, transportation factors, and overall satisfaction with the comfort and adequacy of the current residence.

Aggregated across both the Army and Air Force, service member overall satisfaction with the adequacy and comfort of the permanent residence showed the highest relationship (among the selected group of variables above) with all three perceived effects of living conditions. The relationships were all positive; that is, the higher the satisfaction, the more likely the perceived effects of living conditions were seen as positive. The degree of relationship as measured by the correlation coefficients ranged from .36 to .45 percent, indicating low but statistically reliable associations. The highest relationship was between overall satisfaction with the residence and living condition effects on job performance.

## **DISCUSSION**

This discussion concerns only the responses of accompanied service members in the Army and Air Force in Germany, since the unaccompanied groups in both Services were very small.

In the Army sample, the majority of respondents were officers (both warrant and commissioned). In the Air Force sample, the majority were enlisted service members, with about one-half of the total number of respondents in the E-4 to E-6 and E-7 to E-9 pay grade groups. Over 90 percent of the respondents in both Services were accompanied. There were few women in the sample and only 10 percent or less service members with local national spouses. A large majority of the respondents were career motivated. Over two-thirds said they would probably or definitely remain in the Service for at least 20 years. Another 13 percent in the Army and 16 percent in the Air Force had already served 20 years or more. Nearly all of the Army respondents and about 80 percent of the Air Force respondents had households with children. Very few of these households included nonsponsored dependents.

Over 95 percent of the respondents were living in permanent housing at the time of the survey. The majority of the Army service members were living in government-owned housing; while the majority of the Air Force members were living in economy housing.

Approximately equal percentages in each Service lived in government-leased and "other" housing. Housing preference in each Service paralleled the type of housing where the majority lived--government-owned in the Army and economy housing in the Air Force. Only a small percentage in either Service was living in a type of housing that they did not prefer.

Overall satisfaction with the adequacy and comfort of the residence was reported by the majority of service members in each Service, while 32 percent in the Army and 26 percent in the Air Force expressed dissatisfaction. There were no differences in overall satisfaction as a function of pay grade group in either Service. In the Army, satisfaction was higher among occupants of government-owned than government-leased and economy housing. In the Air Force, satisfaction was higher in both government-owned and government-leased housing than in economy housing. Several comments written at the end of the questionnaire indicated that service members living in Berlin had unusually good housing conditions that they recognized as different than in other parts of Germany.

The relationship found between overall satisfaction and the type of permanent housing was not true of temporary lodging. Similar percentages in government and in economy lodgings were satisfied and dissatisfied with their quarters, with the exception of occupants of government temporary lodging in the Army. In this latter case, a higher percentage were satisfied than dissatisfied. Regardless of housing type, in both Services, dissatisfaction was greater with temporary quarters than with permanent housing.

Although overall satisfaction was higher among those in permanent government-owned housing, occupants of government-leased and economy housing in the Army sample were more satisfied with specific aspects of their residences, facilities, and services. Similarly, in the Air Force sample, residents of government-owned housing expressed more overall satisfaction than those in government-leased or economy housing, but they were dissatisfied with more aspects of their housing than those in government-leased or economy housing. This finding seems odd at first glance. However, almost all government-owned housing in Germany is stairwell style apartments. They are generally located on or near the installation which gives them some important advantages over housing located in the economy, particularly in terms of costs and convenience. But at the same time, stairwell housing units have distinct disadvantages. One Air Force officer (O-3) characterized living conditions in a stairwell unit as making "one feel like just another ant in the anthill." An Air Force senior enlisted respondent explained the problem in more detail:

The stairwell housing in Germany leaves a lot to be desired. No privacy, 8 families per stairwell; all ages, ranks, and services commingled in stairwell; laundry facilities located in basement with certain times available per week. Extra duty as building leaders and area leaders with no compensation for senior member of the building and area. All outlets are 220 volt in non-renovated quarters. Contracts for repairs, improvements, take 3 to 5 years to complete. There is no security within the housing area. (Air Force E-7)

Pay grade group was related to satisfaction with many of the aspects of housing, facilities, and services. However, the pattern of relationships was highly varied, and probably had less to do with pay grade group than with where the groups were living and their expectations. For example, in the Air Force sample the lower enlisted pay grades were more satisfied than their senior counterparts with bedroom size(s), number of bedrooms, and appearance of both the residence and the neighborhood. In contrast, the

senior enlisted and officers were more satisfied than their junior counterparts with the convenience of their residences to support facilities. It may be that the lower graded enlisted personnel living in stairwell units on or near their duty station considered the situation to be more desirable than a senior person would. The long waiting lists for government-owned housing imply that these units are in demand. However, most of the negative comments that were received about the units came from officers. Dissatisfaction with the co-mingling of pay grades was a common theme. Also, in the Air Force sample, large percentages lived in economy housing. Personnel who live in the economy may be sacrificing convenience for other aspects of their accommodations, while those who live in stairwells have different problems altogether.

Convenience of the residence to major medical facilities showed the highest level of dissatisfaction in both Services. Written comments talked about the distance to the nearest hospital being 30 to 35 miles. Others discussed the medical facilities problem in terms of the shortages of doctors, as illustrated by this comment from a warrant officer at an Army post in Baumholder:

We . . . have a big problem within our medical facilities. With the dispensary and all the small aid stations, we just don't have enough highly trained doctors to support a community of this size. There are over 20,000 military personnel, and God only knows how many civilian and military dependents there are. Baumholder needs all the help they can get. (Army W-1)

For those aspects of housing, facilities and services not applicable to all respondents (chiefly dealing with costs and facilities for children), high levels of dissatisfaction were expressed with the number/availability of recreational facilities for preteen and teenage children in both Services, and with the availability and quality of government furniture in the Air Force sample. Several write-in comments dealt with the lack of recreational programs for youth. One Air Force E-6 wrote "Youth centers should be more than "hangouts" for kids. More games, entertainment versus pool, video games, and smoking areas." An Air Force officer (O-3) raised this issue: "NEED youth activities that go beyond baseball/football. If you're female, nonathletically inclined, there's nothing to do and no place to go."

Across Services, the highest percentage of respondents (60% or more) were satisfied with the convenience of their residences to the duty station and support facilities (e.g., exchange), hot water supply, electrical service, number of bedrooms, personal safety, and security.

Overall satisfaction with one's residence was largely a function of satisfaction with the residence size (especially among Army respondents living in government-owned housing and Air Force respondents living in government-leased and economy housing). Also important to overall satisfaction was satisfaction with privacy. That is, in general, respondents who were satisfied with the size of their residences and the privacy they had in them tended to be satisfied with the overall comfort and adequacy of the residence, and vice versa for those who were dissatisfied.

Analysis of the 33 items of satisfaction with permanent housing, facilities and services (including overall satisfaction) showed that satisfaction is multidimensional. The following five somewhat independent dimensions (factors) emerged through a factor analysis of the items: (1) satisfaction with location and convenience of the residence to the duty station and most support facilities, (2) satisfaction with residence and room sizes



and with privacy, (3) satisfaction with the immediate physical-psychological surroundings (e.g., security, privacy, and appearance), (4) satisfaction with recreational opportunities for children, and (5) satisfaction with household systems and kitchens (e.g., operating condition of appliances, laundry facilities). Overall satisfaction with the residence was most closely associated with the size/privacy and the immediate physical-psychological surroundings dimensions. The importance of these findings is that there are different "types" of satisfaction as measured by the 33 items and that overall satisfaction is most related to the two dimensions above.

Overall satisfaction with the adequacy and comfort of the residence was the most statistically influential predictor of service member perception of the effects of living conditions on job performance, military career intentions, and willingness to choose the present assignment over again. The more satisfied the individual was with his/her residence, the more likely he/she was to report positive effects of living conditions, and vice versa. To a lesser degree, the experiences in temporary housing also influenced the reporting of living conditions effect. Although not a direct cause and effect relationship, these results demonstrate (for the subsample of individuals who answered all the questions) that various aspects of the individuals' living conditions and experiences with permanent and temporary housing may have an impact on their military readiness (i.e., job performance) and on retention (i.e., military career intentions).

Housing offices aid service members in obtaining economy housing as well as maintain waiting lists for government housing. Service members in both Services who were living in economy housing rated most of the housing office services as helpful. However, majorities or substantial minorities (37 to 61%) of those responding to the questions on helpfulness reported either that some services were not provided or that they did not use them. The services most often reported as not provided or not used were orientation to the local housing market, transportation to inspect rentals, and help with utility companies. Unfortunately, the data provide no explanation for this. Nonuse of services may be a function of service members perceiving inadequacy on the part of the housing offices or of a lack of need. Reporting of services not being provided may also be due to a lack of communication or a lack of advertisement of the services.

There was also a substantial degree of dissatisfaction with several aspects of listings of economy housing in both Services, especially the number of listings, up-to-date information on listings, and size and cost of available rentals. Comments received about the housing office were negative and included perceptions of unfairness and lack of interest in helping the service member, as illustrated by this comment from an Air Force officer:

Our HRO was of little or no help. They acted like they were doing you a favor. To get anything done I had to go in uniform so they would know I was the military member and the officer, not my husband. (Air Force O-3)

A majority of respondents in both Services were dissatisfied with the wait for government family housing, which suggests shortages of both government housing and economy housing. Over 40 percent, but less than a majority, were also dissatisfied with the assignment services of the housing office. The same perceptions of unfairness found on the referral side were found for the assignment side of the housing office, as illustrated by this comment from an Army officer:

Honesty among those personnel that work in HRO would be a big benefit. I have found that quarters are given, many times, based on

pressure from different chains of command. There is nothing fair or equitable about how quarters are currently awarded. If I can't turn down one set of quarters for one that I like better, then neither should the next person in the door. (Army O-3)

The data suggest that improvements may be needed in some housing offices in provision of needed services and in obtaining the trust necessary for individuals who wish to use the services.

The importance of family housing to the respondents in both Services was demonstrated in their choices of the most serious problems faced and the facilities that they felt needed improvement. Permanent housing was selected most frequently as one of the three most serious problems faced, as well as the single most serious problem, by the service members and dependents. Family housing was the most often selected among the four important areas of construction, expansion, leasing, or renovation to improve living conditions at the duty station in the Army sample, and very close to the most highly selected area in the Air Force (after parking facilities). Family housing was chosen most frequently as the single most important area needing improvement in both Services.

Service members who selected permanent housing as one of their most serious problems differed from those who did not on many of the housing-relevant items. The former group were much more dissatisfied with the comfort and adequacy of their residences. In the Army sample, respondents who chose permanent housing as a problem showed greater dissatisfaction on almost all of the 31 items that measured their satisfaction level on aspects of their housing. In the Air Force sample, this relationship was not as strong. In both samples, those who were troubled about permanent housing were more likely to be living in government-owned housing. Those choosing permanent housing as a problem were also more likely to perceive negative effects of living conditions on their job performance, military career intention, and willingness to choose the present assignment over again. They were also much more dissatisfied with the wait for government housing and with assignment and referral services of the housing office than were those who did not indicate that family housing was a serious problem.

In general, when a service member reported permanent housing as a problem, he/she was expressing overall dissatisfaction with the residence and many aspects of the residence as well as with the process of obtaining housing. For some, the problem probably stems from the difficulties in living in government stairwell units. These difficulties include lack of privacy, noise, inadequate laundry facilities, unsupervised children playing in the stairwells, mixing of ranks, and ineffectual methods available to the building leaders to correct occupant abuse problems.

Other problems frequently selected in both Services were working conditions, spouse employment, medical/dental care, and language and cultural differences. Initial housing costs and vehicles were frequently selected by Air Force, but not Army personnel. More of the Air Force respondents than Army were living in economy housing at the time of the survey. Parallel to the problems, highly selected areas for improvement were medical facilities and work areas.

In addition to those improvement areas already mentioned, troop barracks, commissaries, and temporary lodging facilities were selected by more than would be expected on a random basis in the Army. In the Air Force, the most highly selected area for improvement was parking facilities.

The need for government family housing for the lower graded enlisted personnel was recognized by a majority of respondents in both Services. They were in favor of extending eligibility for government family housing regardless of pay grade, of assignment by bedroom requirement only, and of construction of housing specifically for those currently not eligible. The general favorability to some change was also seen in a large opposition to the proposal that would retain current assignment procedures.

Write-in comments from higher pay grade respondents noted the need for government housing for the lower-grade enlisted service members. One Air Force E-6 suggested that "The E-1 through E-4s . . . make or break our armed forces. So why not build family housing for them, they need it more than the higher ranks." An Air Force officer seconded this motion with the following explanation of why it is so important to provide housing for the junior enlisted:

Housing for young enlisted (E-1--E-4) who are married (is needed. They) experience not only culture shock, but (are) under pressures of discontented families and the burdens of finding housing on the economy. They don't have the \$1,000.00 down payment to get into housing or money to buy a second auto. They should be given priority on government-owned housing. Families would be happier and we'd keep highly motivated first-termers. Officers and senior enlisted can afford off-base facilities. First-termers struggle and it affects the mission. (Air Force O-3)

Self-interest overcame some of the favorability toward extending eligibility to and constructing family housing for the junior enlisted. When negative consequences were associated with these proposals, favorability decreased among all pay grade groups in both services. The majority in the Army sample became opposed to the two proposals when they included the potential for delaying construction of all other family housing or increasing the waiting time for everyone. In the Air Force sample, the proposal to extend eligibility even if waiting time increased was still supported by the majority. However, the proposal for construction of family housing for the junior enlisted with the potential to delay all other family housing construction was favored and opposed by approximately equal percentages. The group who would benefit the most (E-1 to E-3s in both Services) remained more in favor of the proposals, even with the negative consequences, than did the other pay grade groups.

Service members in both Services generally responded favorably to proposals that would provide them with an allowance for performing maintenance and repairs beyond what would be expected and that would allow the choice of living in units with fewer bedrooms in exchange for retaining some of the BAQ. Respondents were more in favor of than opposed to a utility allowance proposal that would allow them to keep that part which was not used or pay for usage over the allowance. However, they were highly opposed (60%) to the proposal allowing payment of additional money over the BAQ in exchange for the choice of living in units with more bedrooms.

The responses of the service members to these policy proposals along with their written comments suggest that most individuals are ready for change in the assignment policy for government housing (except when some perceive negative consequences to themselves). They also seem ready to make choices and/or to behave in a manner that would allow them to receive extra allowances or retain part of their BAQ.

A limited amount of data relevant to the military mission were obtained concerning the perceived effects of living conditions on job performance and military career intentions. A majority of the respondents saw an effect of living conditions on their job performance and a substantial minority on their career intentions. Of those who believed there was an effect, a small majority perceived the effect to be negative. These data, although indirect, provide some evidence that living conditions may influence military performance and retention. Living conditions were related primarily to satisfaction with one's residence.

## CONCLUSIONS

1. Permanent housing was the most highly reported serious problem, as well as the most frequently identified area for improvement, in both Services. In the Air Force sample, over half also selected parking facilities as an area needing improvement.

2. Other problems frequently reported in both Services were medical/dental care, working conditions, spouse employment, and language and cultural differences.

3. Type of housing occupied varied by Service. A majority (64.7%) of the Army respondents lived in government-owned housing, 12.6 percent in government-leased housing, and only 20.8 percent in economy housing. In contrast, only 38.5 percent of the Air Force respondents lived in government-owned housing and 9.3 percent in government-leased housing, while 51.1 percent lived in economy housing.

4. Respondents in both Services were generally living in the type of housing that they preferred (i.e., government or economy). Discrepancies between current occupancy and housing preference were low (10% or less).

5. Overall dissatisfaction with temporary lodgings was found among 42 to 49 percent of the respondents in both Services. Aspects of the lodgings eliciting the greatest amount of dissatisfaction were privacy; kitchen, eating, and cooking facilities; laundry facilities; play space for children; and size of the quarters.

6. Service members in both Services in Germany were generally more satisfied than dissatisfied with most aspects of their permanent residences. Where dissatisfaction was found, it was greater among the occupants of government-owned housing than government-leased or economy housing. This may be due to the nature of stairwell housing.

7. A majority of respondents in both Services were dissatisfied with the length of wait for government housing (52%) and with referral services of the housing offices (57 to 59%). A significant minority of respondents in both Services (44 to 47%) were dissatisfied with assignment services of the housing offices.

8. In both Services, a high level of dissatisfaction (73 to 74%) was found with the number of economy housing listings available at the housing offices. Reporting of nonuse or nonprovision of services by the housing office was highest for transportation to inspect economy rentals (50 to 53%) and help with utility companies (55 to 60%).

9. A majority of service members in both Services (54 to 61%) reported that their living conditions had an effect on their job performance. A substantial minority (43 to 44%) also reported a living condition effect on military career intentions. Of those

reporting effects, a slight majority (approximately 10% more) perceived these effects to be negative. Living conditions were related primarily to satisfaction with one's residence.

10. Service members in both Services generally desired changes in government family housing assignment policy, including: extension of eligibility to the junior enlisted; construction of housing specifically for the junior enlisted; and assignment on the basis of bedroom requirements. However, when negative consequences were attached to these proposals, support decreased across all pay grades. Respondents also generally supported choice-allowance proposals that offered them additional financial compensation.

## RESULTS--ITALY (ARMY, NAVY, AIR FORCE)

### PROFILE OF SAMPLES

Three Services were represented in the sample from Italy, the Army, the Navy, and the Air Force. The return rates (see Table 3) show that, in general, we can be highly to moderately confident that the Army and Navy data for the officers and top enlisted pay grades are representative of the populations of these services in Italy. However, because of low return rates for the Army and Navy E-6 and lower enlisted pay grades, and for all officer and enlisted grades in the Air Force sample, confidence that these results could be generalized to the population is very low.

The analyses reported in this section were based on the complete data set for each Service, containing information for all respondents.

#### Demographic Characteristics

This section presents the demographic characteristics of the three Service samples.

#### Pay Grade

Table I-1<sup>5</sup> shows the distribution of pay grade groups by Service.

Table I-1

Pay Grade Group by Service (Q1-Q2)

Pay Grade Group	Army		Navy		Air Force		Total	
	n	%	n	%	n	%	n	%
E-1 to E-3	20	2.8	31	3.9	45	10.8	96	5.0
E-4 to E-6	262	36.9	293	37.3	208	49.8	763	39.9
E-7 to E-9	251	35.4	218	27.8	115	27.5	584	30.5
W-1 to W-4	32	4.5	16	2.0	--	--	48	2.5
O-1 to O-3	47	6.6	74	9.4	22	5.3	143	7.5
O-4 to O-6	98	13.8	153	19.5	28	6.7	279	14.6
Total	710	100.0	785	99.9	418	100.1	1913	100.0

By far the largest pay grade groups in the three Services were the E-4 to E-6 and the E-7 to E-9 groups, with approximately 65 to 77 percent of each of the Service samples made up of these two groups. Officers constitute a larger proportion of the Army and Navy samples (about one-quarter to almost one-third) than of the Air Force sample (only 12%). As discussed on p. 10 (return rates), the E-1 to E-3 groups for all three Services and the E-4 to E-6 and O-1 to O-3 groups in the Air Force sample had much lower return rates than the other pay grade groups. The percentages in Table I-1 are not an accurate reflection of the pay grade groups in the population in Italy.

<sup>5</sup>Prefix of table numbers identifies survey results by country: I = Italy.

### Sex, Marital Status, and Spouse Nationality (Q3-Q6)

Most of the respondents were males, ranging from 90.4 percent of the Navy to 96.1 percent of the Army, with the Air Force in between at 93.5 percent. Reflecting the way in which the sample was chosen, 92 percent to 95 percent of the respondents by Service were currently married. About 5 percent of the respondents overall had married since arriving in Italy. From 8 to 11 percent by Service were married to local nationals, while another 15 to 17 percent by Service were married to other foreign nationals.

### Household Composition

Table I-2 shows the composition of the households by Service. The very large majority of households included children. Households with single-parent service members, those that included relatives, and those with two service members were relatively rare. While the overall percentage of dual career households was small, there were significantly more Navy two-service-member households than in the other Services.

Table I-2  
Household Composition (Q7)

Household Composition	Army (n = 705)	Navy (n = 783)	Air Force (n = 415)
Households without children	13.3	20.6	18.6
Households with children	86.7	79.4	81.4
Single parent households	.7	2.7	3.9
Households with relatives as dependents	5.7	6.1	5.3
Dual career households	1.4	5.5	2.2

For all three services, the junior enlisted group (E-1 to E-3) was more likely than other pay grade groups not to have children. In all other pay grade groups in all Services, 70 percent or more of the service members had children living with them. Among the E-1 to E-3s, the percent of those with children was approximately 50 to 60 percent.

Household Size (Q14)/Age of Children. For those service members who were accompanied by dependents, the average number of live-in dependents ranged from 2.4 percent for Navy respondents to about 2.6 percent for Air Force and 2.7 percent for Army respondents. The number of dependents most frequently reported was three, with about 34 percent of each Service group having that number living with them.

Table I-3 presents the percent of accompanied service members who had dependents in various age groups. Each percentage shown is based on the number of respondents (n) shown for that service. Since service members may have dependents in more than one age group, the percentages do not add to 100.

Table I-3  
Ages of Children (Q8-Q11)

Age Group	Army (%) (n = 620)	Navy (%) (n = 668)	Air Force (%) (n = 379)
Children under 2 years of age	22.4	21.6	24.3
Children 2 to 5 years of age	34.7	26.8	28.2
Children 6 to 12 years of age	49.0	42.2	42.7
Children 13 to 18 years of age	27.4	28.1	30.6

More respondents had children in the 6 to 12 age group than any other. Reflecting the Navy respondents' lower average number of dependents, the Navy percentages for each age group tended to be lower than those of the other two Services.

Table I-4 shows the number of children in each age group by Service.

Command Sponsorship of Dependents (Q13). Barely more than 2 percent of the respondents across Services had dependents with them who were not command sponsored. Comparisons of service members with and without command sponsorship for their live-in dependents are presented with special groups (p. 240).

#### Spouse Employment

Table I-5 shows the percentage of spouses of accompanied respondents in each employment status category in CONUS prior to the current tour of duty and currently in Italy.

All Services showed a high current rate of spouse unemployment, ranging from 66 to 72 percent in the three Services. This rate is 28 to 38 percent higher than in CONUS. Perhaps of most interest, from 23 to 29 percent by Service were looking for work, compared to the roughly 5 to 7 percent rate in CONUS. Also of interest is the significantly higher percentage of Navy spouses in the military. When combined with the current civilian employment percentage, this high rate of military employment brings the Navy overall rate of spouse employment more in line with the corresponding rates for the other Services.

The occurrence of relatively small numbers of respondents in many pay grade groups makes detailed analysis by pay grade risky. Generally, spouses of officer respondents, particularly O-4 to O-6, were more likely to be unemployed and not looking for a job than were enlisted respondents' spouses. No consistent or strong differences among pay grade groups were found in the percentage of spouses currently employed.



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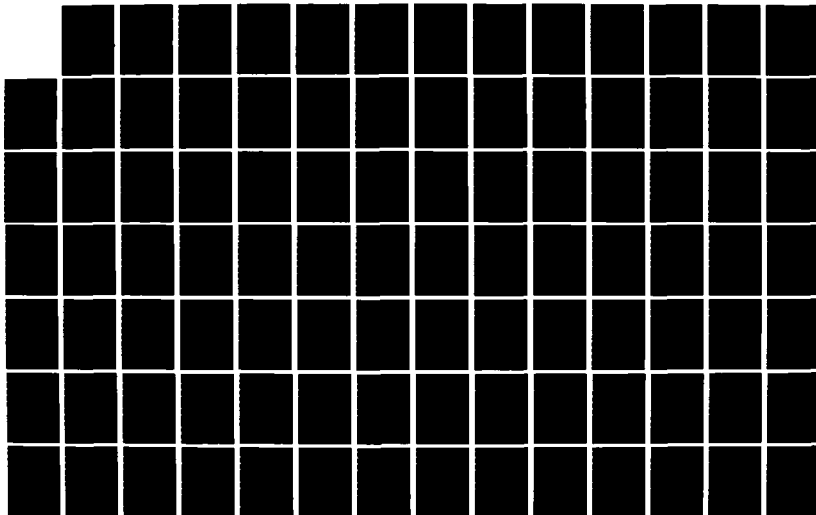
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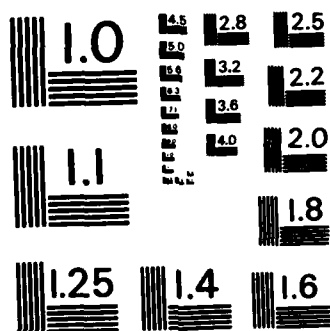
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Table I-4

## Number of Children in Each Age Group

Age Group (Years)	Army		Navy		Air Force		Total	
	n	%	n	%	n	%	n	%
Q8: Children under 2	150	13.7	159	15.5	110	16.9	419	15.1
Q9: Children 2 to 5	268	24.4	207	20.2	134	20.6	609	22.0
Q10: Children 6 to 12	445	40.6	387	37.8	226	34.8	1058	38.2
Q11: Children 13 to 18	234	21.3	271	26.5	179	27.6	684	24.7
Total	1097		1024		649		2770	

Table 1-5

Spouse Employment Status--Italy/CONUS (Q145-Q146)

Status	Army			Navy			Air Force			Total		
	Italy	CONUS		Italy	CONUS		Italy	CONUS		Italy	CONUS	
	n	%	n	n	%	n	n	%	n	n	%	n
<b>Unemployed, not looking for work</b>												
E-1 to E-3	4	26.7	2	9	40.9	4	23.0	12	30.0	3	16.7	25
E-4 to E-6	81	38.0	57	92	39.3	37	20.4	53	31.5	40	27.8	226
E-7 to E-9	64	30.5	62	88	48.1	32	28.1	39	37.9	26	32.5	191
W-1 to W-4	7	22.6	7	43.8	7	33.3	--	--	--	--	--	14
O-1 to O-3	26	66.7	21	36.8	39	62.9	17	32.1	14	70.0	12	63.2
O-4 to O-6	55	61.8	37	46.3	83	63.4	55	49.1	14	58.3	4	25.0
Total	237	39.7	186	318	49.1	149	29.4	132	37.2	85	30.7	687
<b>Unemployed, looking for work</b>												
E-1 to E-3	10	66.7	0	0.0	6	27.3	1	6.3	16	40.0	1	5.6
E-4 to E-6	64	30.0	17	9.1	64	27.4	8	4.4	55	32.7	14	9.7
E-7 to E-9	62	29.5	4	2.1	52	28.4	8	6.0	27	26.2	5	6.3
W-1 to W-4	11	35.5	3	13.0	5	31.3	1	8.3	--	--	--	16
O-1 to O-3	7	17.9	0	0.0	12	19.4	3	5.7	2	10.0	0	0.0
O-4 to O-6	15	16.9	2	2.5	11	8.4	4	3.6	3	12.5	0	0.0
Total	169	28.3	26	4.9	150	23.1	25	4.9	103	29.0	20	7.2
<b>Employed full time (civilian)</b>												
E-1 to E-3	0	0.0	8	61.5	1	4.5	3	18.8	1	2.5	11	61.1
E-4 to E-6	25	11.7	79	42.5	23	9.8	79	43.6	18	10.7	63	43.8
E-7 to E-9	40	19.0	90	48.1	21	11.5	65	48.9	21	20.4	31	38.8
W-1 to W-4	7	22.6	10	43.5	3	18.8	7	58.3	--	--	--	10
O-1 to O-3	1	2.6	10	27.0	6	9.7	23	43.4	0	0.0	2	10.5
O-4 to O-6	6	6.7	24	30.0	25	19.1	36	32.1	1	4.2	5	31.3
Total	79	13.2	221	42.0	79	12.2	213	42.0	41	11.5	112	40.4
<b>Employed P/T or intermittently (civilian)</b>												
E-1 to E-3	1	6.7	3	23.1	3	13.6	4	25.0	10	25.0	2	11.1
E-4 to E-6	35	16.4	23	12.4	31	13.2	30	16.6	36	21.4	19	13.2
E-7 to E-9	41	19.5	27	14.4	21	11.5	24	18.0	15	14.6	17	21.3
W-1 to W-4	6	19.4	3	13.0	1	6.3	0	0.0	--	--	--	7
O-1 to O-3	5	12.8	6	16.2	4	6.5	9	17.0	4	20.0	4	21.1
O-4 to O-6	12	13.5	16	20.0	9	6.9	12	10.7	6	25.0	7	43.8
Total	100	16.8	78	14.8	69	10.6	79	15.6	71	20.0	49	17.7
<b>In the military</b>												
E-1 to E-3	0	0.0	0	0.0	3	13.6	4	25.0	1	2.5	1	5.6
E-4 to E-6	8	3.8	10	5.4	24	10.3	27	14.9	6	3.6	8	5.6
E-7 to E-9	3	1.4	4	2.1	1	0.5	4	3.0	1	1.0	1	1.3
W-1 to W-4	0	0.0	0	0.0	0	0.0	0	0.0	--	--	--	0
O-1 to O-3	0	0.0	0	0.0	1	1.6	1	1.9	0	0.0	1	5.3
O-4 to O-6	1	1.1	1	1.3	3	2.3	5	4.5	0	0.0	0	0.0
Total	12	2.0	15	2.9	32	4.9	41	8.1	8	2.3	11	4.0

Individual spouses' employment patterns tended to be similar between CONUS and Italy. That is, those individuals who were unemployed and not looking for work in CONUS strongly tended to be in the same status currently, while those employed in CONUS were also more likely to be employed in Italy. The major difference was that far fewer previously employed spouses had jobs in Italy than were looking for them.

#### Family/Spouse Income (Q147, Q148)

Table I-6 shows the median family income for the previous month by pay grade group. Total family income was generally a reflection of pay grade. However, the reader is reminded that the pay grade groups did not contain equal numbers by pay grade. The median incomes reported are affected by this unequal representation.

Table I-6

#### Median Family Income for Previous Month by Pay Grade Group (Q147)

Pay Grade Group	Army		Navy		Air Force		Total	
	n	\$	n	\$	n	\$	n	\$
E-1 to E-3	15	1280	21	1400	38	1195	74	1199
E-4 to E-6	201	1429	223	1502	163	1498	587	1495
E-7 to E-9	198	1975	168	1996	95	2070	461	2000
W-1 to W-4	28	2315	15	2720	--	--	43	2543
O-1 to O-3	36	2500	60	2645	20	2570	116	2602
O-4 to O-6	85	3500	124	3905	24	3455	233	3757

Table I-7 shows the percentage of spouses who were reported as having no income, as well as the median income by pay grade group of those spouses who were reported to have had income during the previous month.

The percentage of spouses without income varied considerably in the Army sample (from 54% of W-1 to W-4 respondents to 86.7% of E-1 to E-3 respondents). Overall, a majority of the spouses in all pay grade groups and countries had no income for the previous month. The variability in spouse income found within countries is primarily a function of the low number of responses to the question. The variability in spouse income levels between countries may reflect the differing locations of the Services (e.g., the Air Force personnel are located in the Alps where job opportunities may be especially scarce).

#### Special Groups

Table I-8 presents the number and percentage of respondents within each Service sample that belonged to each of the six special groups.

Differences between groups and their opposites (e.g., female versus male service members) as well as responses to items that applied only to these groups are presented with special groups (p. 240).

Table I-7  
Spouse Income by Pay Grade Group (Q148)

Pay Grade Group	Army		Navy		Air Force		Total	
	n	%	n	%	n	%	n	%
<b>No Income</b>								
E-1 to E-3	13	86.7	11	61.1	19	61.3	43	67.2
E-4 to E-6	111	64.9	129	63.2	97	64.7	337	64.2
E-7 to E-9	114	59.4	111	70.7	61	67.0	286	65.0
W-1 to W-4	15	53.6	11	73.3	--	--	26	60.5
O-1 to O-3	27	77.1	48	82.8	13	76.5	88	80.0
O-4 to O-6	60	76.9	85	69.1	16	69.6	161	71.9
Total	340	65.5	395	75.0	206	66.0	941	66.9
<b>With Income</b>								
	n	\$	n	\$	n	\$	n	\$
E-1 to E-3	2	1050	7	550	12	397	21	420
E-4 to E-6	60	605	75	604	53	404	188	585
E-7 to E-9	78	555	46	598	30	525	154	596
W-1 to W-4	13	550	4	540	--	--	17	550
O-1 to O-3	8	540	10	1000	4	325	22	530
O-4 to O-6	18	585	38	1005	7	500	63	800
Total	179	579	180	706	106	441	465	606

Table I-8  
Special Groups

Special Group	Army		Navy		Air Force		Total	
	n	%	n	%	n	%	n	%
Accompanied female service members	22	3.5	57	8.6	20	5.3	99	5.9
Accompanied single parents	9	2.9	15	2.9	14	4.7	38	3.4
Service members with local national spouses	70	11.4	66	10.0	32	8.7	168	10.2
Service members with non-sponsored dependents	12	1.9	15	2.3	7	1.9	34	2.1
Respondents planning to leave the Service (excluding those with 20 years or more service)	30	5.7	30	5.7	24	7.5	84	6.1
Unaccompanied service members	55	8.2	60	8.3	20	5.1	135	7.6

## Service History

Three items in the questionnaire related to this topic: prior time on active duty in foreign locations; time at the present post, base, or duty station; and time remaining in the current overseas tour.

### Prior Foreign Experience (Q17)

A large majority of each Service sample, about 71 percent of the Navy and Air Force and 80 percent of the Army respondents, had prior experience in foreign locations. In fact, just over one-half (54%) of the Navy and Air Force and nearly two-thirds (65%) of the Army sample had two years or more prior foreign duty.

### Time Spent/Remaining in the Current Tour (Q18, Q19)

The Army and Navy respondents were fairly evenly divided into three groups according to the time already spent at their present duty station: less than one year, between one and two years, and more than two years. In contrast, the Air Force respondents had spent somewhat more time at their duty station, with 40 percent of the sample in each of the last two groups. Just under one-half of the respondents in each Service reported having more than 16 months remaining in their tour. The short-termers, those with 6 months or less remaining in the current tour, ranged from 24.5 percent of the Navy sample to 18.7 percent of the Air Force respondents.

These figures lead us to expect that most of the respondents had knowledge from their experiences living overseas and had probably achieved some stability in their current living arrangements.

## Military Career Intentions

Table I-9 presents the data on respondents' intention to complete a service career of at least 20 years. The response patterns for career intentions were similar for all three Service groups.

Table I-9  
Career Intentions (Q20)

Career Intention	Army		Navy		Air Force		Total	
	n	%	n	%	n	%	n	%
Definitely do not intend to remain at least 20 years	25	3.5	29	3.7	22	5.3	76	4.0
Probably will not remain at least 20 years	21	3.0	20	2.6	13	3.1	54	2.8
Uncertain	75	10.6	88	11.2	44	10.6	207	10.8
Probably will remain at least 20 years	135	19.1	173	22.1	96	23.0	404	21.2
Definitely intend to remain at least 20 years	329	46.5	312	39.8	175	42.0	816	42.8
Already have served 20 years or more	122	17.3	161	20.6	67	16.1	350	18.4
Total	707	100.0	783	100.0	417	100.1	1907	100.0

Large majorities in all Services were career oriented. At least 81 percent of any Service group either intended to stay in for or had already completed 20 years of service. Less than 9 percent in each Service said they probably or definitely would not stay in the Service at least 20 years.

Predictably, respondents in the higher enlisted and officer pay grades across all three Services were more solidly career oriented than the less senior groups. Further, the E-1 to E-6 and O-1 to O-3 groups had much higher percentages of people who were uncertain than did the other pay grade groups.

#### Preferences After Completion of the Current Tour

Table I-10 shows the percentages of respondents who expressed preferences for each of the alternative assignment options after completion of their current tour.

Table I-10  
Preferences After Completion of the Current Tour (Q21)

Preference	Army		Navy		Air Force		Total	
	n	%	n	%	n	%	n	%
Another full tour in present country	68	9.6	44	5.6	17	4.1	129	6.8
Extend (for less than a full tour) in current location	54	7.7	46	5.9	33	7.9	133	7.0
Another full tour in different foreign country	108	15.3	212	27.1	85	20.4	405	21.3
Return to CONUS	353	50.1	366	46.8	203	48.7	922	48.4
Leave the Service	56	7.9	49	6.3	38	9.1	143	7.5
Unsure/no preference	66	9.4	65	8.3	41	9.8	172	9.0
Total	705	100.0	782	100.0	417	100.0	1904	100.0

Close to one-half of each Service sample wished to return to CONUS. Only about 12 percent of the Navy and Air Force samples and 17 percent of the Army respondents wanted to stay in Italy. Across Services, the senior officer (O-4--O-6) groups contained the highest percentages who wanted to return to CONUS. Other than that, response patterns by pay grade differed between Services, and no consistent patterns by pay grade were evident.

#### PERMANENT HOUSING

This survey was designed to focus on the housing experiences and preferences of service members who were accompanied by their families while on overseas tours of duty. Therefore, the remainder of this chapter dealing with respondents stationed in Italy will, unless otherwise noted, report only on those accompanied respondents who comprised 91.8, 91.7, and 94.9 percent of the Army, Navy, and Air Force samples respectively.



This section presents information concerning service members' housing, as well as their housing preferences.

#### Time in Permanent Housing

Substantial majorities of respondents in all three Services were in permanent housing at the time of the survey: 96.6, 96.5, and 93.4 percent of the Army, Navy, and Air Force respondents respectively. Table I-11 shows their length of time in permanent housing.

Table I-11  
Length of Time in Permanent Housing (Q48)

Time in Permanent Housing	Army		Navy		Air Force		Total	
	n	%	n	%	n	%	n	%
1 to 6 months	101	16.8	132	20.4	20	5.7	253	15.8
7 to 12 months	148	24.6	178	27.5	99	28.1	425	26.5
13 to 24 months	202	33.6	177	27.3	129	36.6	508	31.7
25 months or longer	151	25.1	161	24.8	104	29.5	416	26.0
Total	602	100.1	648	100.0	352	99.9	1602	100.0

Navy respondents tended to have the least time in their permanent residences, the Air Force the most. The majority of the sample had at least 9 months, enough time to have settled in and experienced different seasons.

#### Housing Type and Preference

Housing type refers to the ownership of the service member's residence (government-owned/managed, government-leased, economy (including service member purchased), or "other" including local-government owned). Government-owned housing is usually on the duty station; government-leased is generally foreign built and located in the civilian economy.

Table I-12 shows the distribution of current housing types of the accompanied respondents and their preferences for housing type by Service and pay grade group.

There were substantial differences in housing type patterns across Services. Significant numbers of residents of government-owned housing units were found only among Army respondents, where nearly one-quarter occupied such units. About one-fifth of Army and Navy respondents, concentrated in the middle and senior enlisted pay grades, occupied government-leased housing. Economy and other housing was the most frequent category housing in all Services--just over one-half of Army, three-quarters of Navy, and a whopping 90 percent of Air Force respondents. These differences were most likely a function of the availability of adequate government-owned family housing in the locations where the Services had their largest concentrations.

The type of housing most frequently preferred by respondents in every Service and pay grade group except for Air Force E-4 to E-6s was "economy and other." About one-half of the Army and Air Force and 61 percent of the Navy samples preferred this type.

Table I-12

## Current and Preferred Housing Types by Pay Grade Group (Q44-Q45)

Service/Pay Grade Group	n	Responses (%)					
		Government-owned		Government-leased		Economy/Other	
		Current	Preferred	Current	Preferred	Current	Preferred
<u>Army</u>							
E-1 to E-3	15	13.3	26.7	6.7	20.0	80.0	53.3
E-4 to E-6	221	15.2	37.6	31.7	15.4	53.1	47.0
E-7 to E-9	209	26.8	38.8	26.3	8.6	46.9	52.6
W-1 to W-4	31	22.6	29.0	9.7	19.4	67.7	51.6
O-1 to O-3	40	47.5	37.5	5.0	10.0	47.5	52.5
O-4 to O-6	86	36.8	41.9	8.0	11.6	55.2	46.5
Total	602	24.8	37.9	22.9	12.5	52.3	49.6
<u>Navy</u>							
E-1 to E-3	22	0.0	22.7	4.5	13.6	95.5	63.7
E-4 to E-6	237	0.8	28.7	32.9	15.2	66.3	56.1
E-7 to E-9	177	0.6	30.5	29.1	11.9	70.3	57.6
W-2 to W-4	16	0.0	25.0	6.3	18.8	93.7	56.3
O-1 to O-3	63	1.6	30.2	0.0	1.6	98.4	68.3
O-4 to O-6	131	1.5	25.2	0.8	3.8	97.7	71.0
Total	646	0.9	28.3	20.5	10.7	78.5	61.0
<u>Air Force</u>							
E-1 to E-3	36	2.7	38.9	0.0	11.1	97.3	50.0
E-4 to E-6	171	4.1	49.1	4.1	8.8	91.8	42.1
E-7 to E-9	100	8.0	38.0	7.0	6.0	85.0	56.0
O-1 to O-3	20	0.0	30.0	0.0	10.0	100.0	60.0
O-4 to O-6	26	7.7	11.5	11.5	15.4	80.8	73.1
Total	353	5.1	41.1	4.8	8.8	90.1	50.1

This preference was generally strongest among Navy members and Navy and Air Force officers. Of the other alternatives, government-owned was much more frequently preferred than government-leased.

Disparity between current and preferred housing was by far the greatest for those who preferred government-owned and, to a lesser extent, government-leased housing. That is, the preference for government housing was the one most frequently unfulfilled. This was most evident among Navy and Air Force respondents. Few of these respondents were living in government-owned housing. This lack of government-owned units meant that of the three Services in Italy, the Navy and Air Force members were the least likely to be housed as they would like to be.

#### Housing Styles (Q44, Q46)

Table I-13 shows the distribution of accompanied respondents by the style of housing they were occupying.

Army and Navy respondents were at least twice as likely to be living in apartments than in any other style of housing, while Air Force members most often lived in single family units, closely followed by apartments. Across services, the proportion of respondents living in apartments tended to decrease and of those living in single family units to increase as pay grade went up.

For the Army, the only Service with a significant number of respondents living in government-owned units, almost all of their units were duplexes and townhouses. Practically all of the roughly 20 percent of Army and Navy respondents who lived in government-leased units reported they were apartments. Of the economy housing units, relatively few were single family style, ranging from just 21 percent for the Army to 36 percent for the Air Force respondents. Over 40 percent of economy units for the Army and Navy respondents were apartments, while this figure for Air Force members in economy housing was about 30 percent.

#### Commuting Distances to Installation (Q52)/Community Types (Q54)

Commuting distances varied significantly across Services. More than half of the Navy respondents had to commute at least 15 miles, while only 16 percent of the Army and 11 percent of the Air Force respondents had such long commutes. The largest groups of Army (51%) and Air Force (42%) members had commutes of 5 miles or less, compared to just 20 percent of the Navy respondents. Within each Service group, there were no large differences among pay grade groups in distances from the residence to installation.

The question on community type was asked only of those living in economy or government-leased housing. Clear differences were evident between respondents in the two housing types, with majorities of economy housing residents in each Service group (over one-half of Navy to two-thirds of Army and Air Force) having few or no American neighbors. On the other hand, government-leased housing residents in Army and Air Force samples were fairly evenly divided among the mostly-American, equal-mix, and few-or-no-American neighbor groups. In contrast, over half of the Navy government-leased housing residents had mostly American neighbors, and over one-third reported an equal mix.

Table I-13

## Housing Styles by Service and Pay Grade Group (Q46)

Housing Style	Responses (%)						Total
	E-1 to E-3	E-4 to E-6	E-7 to E-9	W-1 to W-4	O-1 to O-3	O-4 to O-6	
<u>Army</u>	(n = 15)	(n = 222)	(n = 209)	(n = 31)	(n = 40)	(n = 86)	(n = 603)
Single family	0.0	5.4	8.6	22.6	20.0	33.7	12.3
Duplex	13.3	14.9	27.8	32.2	47.5	43.0	26.4
Town/rowhouse	13.3	16.7	19.1	22.6	27.5	4.7	16.7
Apartment (walk-up)	66.7	44.6	23.9	16.1	5.0	7.0	28.5
Apartment (elevator)	6.7	18.5	20.6	6.5	0.0	11.6	16.1
<u>Navy</u>	(n = 22)	(n = 238)	(n = 177)	(n = 16)	(n = 63)	(n = 131)	(n = 647)
Single family	13.6	13.0	14.1	25.0	20.6	49.6	21.8
Duplex	9.1	13.5	20.9	18.8	27.0	17.6	17.6
Town/rowhouse	0.0	6.7	6.2	12.5	7.9	9.2	7.1
Apartment (walk-up)	54.5	35.3	27.7	37.5	27.0	16.0	29.2
Apartment (elevator)	22.7	31.5	31.1	6.3	17.5	7.6	24.3
<u>Air Force</u>	(n = 36)	(n = 171)	(n = 100)	--	(n = 20)	(n = 26)	(n = 353)
Single family	16.7	24.6	39.0	--	55.0	69.2	32.9
Duplex	41.7	25.7	25.0	--	20.0	15.4	26.1
Town/rowhouse	5.6	10.5	11.0	--	0.0	15.4	9.9
Apartment (walk-up)	33.3	31.6	19.0	--	25.0	0.0	25.5
Apartment (elevator)	2.8	7.6	6.0	--	0.0	0.0	5.7

### Sharing Living Expenses (Q51)/Out-of-pocket Expenses for Housing (Q50)

Very few respondents in any of the Services (between 1.8% in the Army and 3.7% in the Air Force) reported sharing living expenses with persons other than their dependents.

Responses to the question on out-of-pocket monthly housing expenses above housing allowances (BAQ and Rent Plus or SHA) varied between Services. Fifty-five percent of the Army respondents said they had no such expenses, but the corresponding figures for the Navy and Air Force respondents were only 35.5 percent and 28.2 percent. Table I-14 shows the distribution of responses regarding out-of-pocket expenses for housing by Service and pay grade group. The reader is cautioned that those respondents who reported excessively high monthly expenses probably failed to use the answer form correctly and/or erroneously included all of their initial housing costs in the figure they reported.

#### Army

Although only 47.7 percent of the Army sample lived in government-owned or government-leased housing, 55 percent of the respondents said they had no monthly out-of-pocket expenses for housing. One-third reported expenses up to \$400 per month. The E-1 to E-3 group showed considerably fewer than other pay grade groups with no out-of-pocket expenses; however, the number of respondents in that pay group was very small.

#### Navy

In the Navy sample, where the great majority (78.5%) lived in economy housing, only 35.5 percent reported no out-of-pocket expenses for housing, with 50.2 percent reporting expenses up to \$400. For all pay grade groups, the most common amount reported was \$60 to \$150 per month.

#### Air Force

With 90.1 percent of the respondents living in economy housing, the Air Force sample showed the lowest percentage (28.2%) with no out-of-pocket expenses for housing. Similar to the Navy respondents, over half (53.2%) reported their expenses to be up to \$400 per month.

## **PROCESS OF OBTAINING HOUSING**

### Introduction

Most service members live in temporary housing when they first report to their foreign post, base, or duty station prior to moving into permanent housing. This section presents information on attitudes and experiences about temporary housing and the process of finding permanent housing. As in the previous section, only the responses of accompanied service members are presented.

The questions were directed only to those who had lived in (or currently lived in) temporary lodgings at their present post, base, or duty station. In addition, some of the questions were not relevant to certain groups who have experience in temporary housing (e.g., costs and temporary living allowance for those in government facilities, play space for children for those without children, etc.). Therefore, nonresponse was quite high on some items in this section as a result of lack of experience in temporary lodgings and/or the lack of applicability of selected items to certain groups.

Table I-14

## Out-of-pocket Expenses for Housing Per Month (Q50)

Out-of-pocket Expenses	Responses (%)						Overall Total
	E-1 to E-3	E-4 to E-6	E-7 to E-9	W-1 to W-4	O-1 to O-3	O-4 to O-6	
<u>Army</u>							
None	20.0	60.6	52.5	48.4	60.0	51.6	54.8
\$10 - 50	6.7	9.7	6.9	9.7	5.0	4.4	7.6
60 - 100	20.0	9.3	13.8	9.7	12.5	14.3	12.1
110 - 150	20.0	4.4	5.1	6.5	10.0	5.5	5.6
160 - 200	13.3	2.7	4.6	6.5	2.5	6.5	4.4
210 - 250	0.0	1.3	0.9	3.2	0.0	5.5	1.8
260 - 300	0.0	2.2	1.8	0.0	2.5	1.1	1.8
310 - 400	6.7	0.9	1.8	9.7	0.0	1.1	1.8
410 - 600	6.7	1.3	1.4	0.0	2.5	2.2	1.6
610 - 1000	6.7	6.6	11.1	0.0	5.0	7.7	7.9
1010 - 1500	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1500+	0.0	0.8	0.0	6.5	0.0	0.0	0.7
<u>Navy</u>							
None	9.1	43.7	39.5	50.0	29.7	20.1	35.5
\$10 - 50	9.1	8.1	10.8	6.3	9.4	9.7	9.3
60 - 100	22.7	17.4	23.2	18.8	26.6	19.4	20.5
110 - 150	22.7	6.5	4.3	12.5	7.8	13.4	8.1
160 - 200	4.5	3.2	6.5	0.0	3.1	6.7	4.8
210 - 250	4.5	1.2	1.6	0.0	6.3	8.2	3.3
260 - 300	4.5	2.0	0.5	12.5	1.6	1.5	1.8
310 - 400	4.5	2.0	1.6	0.0	0.0	5.2	2.4
410 - 600	4.5	0.4	1.6	0.0	4.7	6.0	2.4
610 - 1000	13.6	13.8	9.2	0.0	7.8	6.7	10.2
1010 - 1500	0.0	1.2	0.5	0.0	1.6	0.7	0.9
1500+	0.0	0.4	0.5	0.0	1.6	2.1	0.6
<u>Air Force</u>							
None	14.6	25.0	32.7	--	28.6	53.8	28.2
\$10 - 50	22.0	9.8	15.0	--	9.5	19.2	13.2
60 - 100	17.1	21.7	14.0	--	14.3	11.5	17.9
110 - 150	7.3	4.9	11.2	--	14.3	3.8	7.4
160 - 200	4.9	7.6	7.5	--	9.5	3.8	7.1
210 - 250	4.9	4.3	0.9	--	9.5	0.0	3.4
260 - 300	4.9	2.2	1.9	--	4.8	0.0	2.4
310 - 400	2.4	3.3	0.0	--	0.0	0.0	1.8
410 - 600	0.0	0.5	0.9	--	0.0	0.0	0.5
610 - 1000	19.5	16.8	14.0	--	9.5	3.8	15.0
1010 - 1500	2.4	2.7	1.9	--	0.0	3.8	2.4
1500+	0.0	1.0	0.0	--	0.0	0.0	0.6

Table I-23

## Satisfaction with Aspects of Economy Housing Listings (Q29-Q33)

Listing Aspect	n	Responses (%)		
		Dissatisfied	Neutral	Satisfied
<u>Army</u>				
Q29: Number of listings	286	65.5	13.6	20.9
Q30: Up-to-date information on listings	276	52.2	19.2	28.6
Q31: Size of housing units	290	33.5	18.6	47.9
Q32: Rental costs	288	39.9	18.1	42.0
Q33: Commuting distances from rentals to the installations	294	40.4	10.9	48.7
<u>Navy</u>				
Q29: Number of listings	466	65.8	12.9	21.3
Q30: Up-to-date information on listings	467	52.1	20.1	27.8
Q31: Size of housing units	476	26.8	20.4	52.7
Q32: Rental costs	481	36.6	21.2	42.2
Q33: Commuting distances from rentals to the installations	476	44.9	14.3	40.8
<u>Air Force</u>				
Q29: Number of listings	309	81.2	9.4	9.4
Q30: Up-to-date information on listings	304	59.9	17.4	22.7
Q31: Size of housing units	314	34.4	22.6	43.0
Q32: Rental costs	314	26.8	16.6	56.6
Q33: Commuting distances from rentals to installations	314	35.1	13.4	51.6

Pay grade differences in the Army sample showed the enlisted respondents somewhat more satisfied with most of the aspects of economy listings and the O-4 to O-6 group a bit more dissatisfied. No consistent patterns were found in the Navy and Air Force samples. Again, the number of respondents in some of the pay grade groups was very small, and this may have obscured response patterns that might have been apparent in larger samples.

Satisfaction With Waiting Time for Government Housing and Assignment and Referral Services of the Housing Office

Table I-24 shows the responses to questions about satisfaction with waiting time for government housing and assignment and referral services of the housing office. Table I-24 includes responses of all accompanied services members who answered these questions, regardless of their current type of housing (i.e., government or economy).

the widespread dissatisfaction with the number of listings may have affected satisfaction with other aspects of the listings as well.

Table I-22  
Housing Office Helpfulness (Q34-Q39)

Housing Office Service	n	Responses (%)			
		Not Provided	Did Not Use	Not Helpful	Helpful
<u>my</u>					
34: Orientation to the local housing market	313	26.2	8.0	18.2	47.6
35: Transportation to inspect rentals	313	26.8	10.5	5.8	56.9
36: Language interpretation dealing with landlords	307	11.1	10.4	7.8	70.7
37: Lease review and/or rental negotiation	307	9.8	5.9	10.1	74.2
38: Overall help finding economy housing	312	10.3	7.1	21.5	61.1
39: Help with utility companies	312	20.8	9.9	26.9	42.4
<u>my</u>					
34: Orientation to the local housing market	504	17.1	12.7	19.8	50.4
35: Transportation to inspect rentals	504	19.8	17.7	9.5	53.0
36: Language interpretation dealing with landlords	504	4.0	15.5	8.1	72.4
37: Lease review and/or rental negotiation	505	2.8	11.3	11.7	74.2
38: Overall help finding economy housing	506	4.3	12.6	24.1	59.0
39: Help with utility companies	508	4.9	8.3	20.5	66.3
<u>my</u>					
34: Orientation to the local housing market	320	13.8	7.5	25.0	53.7
35: Transportation to inspect rentals	319	61.1	10.0	20.4	8.5
36: Language interpretation dealing with landlords	318	12.6	11.6	12.6	63.2
37: Lease review and/or rental negotiation	318	3.8	5.0	10.4	80.9
38: Overall help finding economy housing	320	10.9	7.8	41.3	40.0
39: Help with utility companies	320	20.6	13.8	30.6	35.0



Among those with sponsors, the sponsor's attitude toward living conditions at the duty station were related to the respondents' perceived effects of the temporary housing experience on choice of permanent housing and on attitude toward living overseas. While these relationships were not strong across all Services, they were nonetheless observable and consistent in direction. Individuals who reported positive sponsor attitudes were less likely to say their temporary housing experience cause them to make a less than satisfactory choice of permanent housing. The same results were found for the effect of the temporary housing experience on attitude toward living overseas. Those who reported positive sponsor attitudes were also somewhat less likely to say their attitude was worsened by their temporary housing experience. This relationship was not apparent, however, for sponsors' helpfulness.

### Housing Office Services/Satisfaction With Services and Helpfulness

Three sets of questionnaire item responses are reported in this section. The first two show data for respondents living in economy housing only. The third set includes all respondents because it deals with more general questions.

#### Housing Office Helpfulness

Table I-22 shows the responses on six items dealing with helpfulness of the housing office in providing services to those seeking housing in the economy.

Of those living in economy housing, the Army and Air Force respondents reported nonavailability of services to a somewhat greater degree than those in the Navy. Across Services, transportation to inspect possible rentals, orientation to the local housing market, and help with utility companies were the three services most frequently not provided.

Of those services that were both provided and used, almost all were seen as helpful by majorities (50.4 to 80.9%) of respondents. The two exceptions to this pattern were the Air Force responses to transportation (8.5%) and overall help in finding housing (40.0%). The housing offices were perceived as helpful overall by Army and Navy respondents who used them by margins greater than two-to-one.

Regarding possible differences by pay grade, the small size of many of the service pay grade groups meant that responses, when distributed across helpfulness rating categories, were frequently too few to produce any trends. It should be recalled that the analysis was performed only on those living in economy housing, and this decreased the sample size considerably.

#### Economy Housing Listings

Five items on the questionnaire asked the respondents to indicate their satisfaction with aspects of economy housing listings. Table I-23 shows the distribution of the responses by residents of economy housing units.

Respondents across all three Services were most dissatisfied with the number of listings available and the lack of up-to-date information available on those listings. Dissatisfaction with number of listings was most acute among the Air Force respondents. Apart from these two aspects of economy rental listings, the other aspects received more satisfied than dissatisfied responses across Services, with the single exception of commuting distance for the Navy sample. The shortage of economy housing units indicated by

Table 1-21  
Sponsor Attitude and Assistance (Q143-Q144)

Item	Army (%)		Navy (%)		Air Force (%)		Total (%)	
	Enlisted	Officer	Enlisted	Officer	Enlisted	Officer	Enlisted	Officer
Q143: Sponsor Attitude	(n = 307)	(n = 148)	(n = 355)	(n = 194)	(n = 274)	(n = 39)	(n = 936)	(n = 381)
Negative	41.7	33.8	39.4	28.4	41.6	25.6	40.8	30.2
Equally negative and positive	23.4	14.9	25.9	13.9	21.9	10.2	23.9	13.9
Positive	34.9	51.3	34.7	57.7	36.5	64.2	35.3	55.9
Q144: Sponsor Assistance	(n = 315)	(n = 154)	(n = 390)	(n = 207)	(n = 300)	(n = 45)	(n = 1005)	(n = 406)
No help needed	7.9	4.5	8.5	5.8	5.7	4.4	7.5	5.2
Sponsor unavailable	9.5	3.9	9.0	4.8	9.0	13.3	9.2	5.4
Not helpful	21.6	12.3	28.7	16.4	28.0	11.1	26.3	14.3
Helpful	61.0	79.3	53.8	73.0	57.3	71.2	57.0	75.1

Table I-20

Effects of the Type of the Last Temporary Lodgings Occupied (Q109-Q111)

Type of Temporary Lodgings	Army	Navy	Air Force
Percent Reporting a Less than Satisfactory Choice of Permanent Housing			
Government-owned/leased	25.9	45.5	42.0
Economy	35.1	27.7	42.5
Percent Reporting a "Worsened" Attitude Toward Living Overseas			
Government-owned/leased	16.0	25.0	29.4
Economy	26.4	26.9	30.6

Table I-19 (Continued)

Service/ Pay Grade	Responses (%)			
	On the Respondent's Attitude (Q111)			
	n	<u>Worsened</u>	<u>No Effect</u>	<u>Improved</u>
<u>Army</u>				
E-1 to E-3	10	30.0	60.0	10.0
E-4 to E-6	137	24.8	68.6	6.6
E-7 to E-9	171	26.3	66.7	7.0
W-1 to W-4	26	15.4	69.2	15.4
O-1 to O-3	33	21.2	72.7	6.1
O-4 to O-6	80	12.5	80.0	7.5
Total	457	22.5	70.0	7.4
<u>Navy</u>				
E-1 to E-3	13	15.4	76.9	7.7
E-4 to E-6	214	30.4	61.7	7.9
E-7 to E-9	166	23.5	71.1	5.4
W-2 to W-4	12	8.3	66.7	25.0
O-1 to O-3	56	25.0	67.9	7.1
O-4 to O-6	119	29.4	64.7	5.9
Total	580	26.9	66.0	7.1
<u>Air Force</u>				
E-1 to E-3	24	25.0	66.7	8.3
E-4 to E-6	151	32.5	62.3	5.3
E-7 to E-9	92	27.2	66.3	6.5
O-1 to O-3	19	31.6	63.2	5.3
O-4 to O-6	15	33.3	60.0	6.7
Total	301	30.2	63.8	6.0
<u>Total</u>				
E-1 to E-3	47	23.4	68.1	8.5
E-4 to E-6	502	29.5	63.7	6.8
E-7 to E-9	429	25.4	68.3	6.3
W-1 to W-4	38	13.2	68.4	18.4
O-1 to O-3	108	25.0	68.5	6.5
O-4 to O-6	214	23.4	70.1	6.5
Total	1338	26.2	66.9	7.0

Table I-19  
Effects of the Temporary Lodging Experience

Service/ Pay Grade		Responses (%)		
On Permanent Housing Choice (Q110)				
	n	<u>Less than Satisfactory</u>	<u>No Effect</u>	<u>Satisfactory Choice</u>
<u>Army</u>				
E-1 to E-3	10	20.0	70.0	10.0
E-4 to E-6	136	32.4	37.5	30.1
E-7 to E-9	170	40.6	36.5	22.9
W-1 to W-4	25	36.0	44.0	20.0
O-1 to O-3	33	24.2	60.6	15.2
O-4 to O-6	80	16.3	61.3	22.5
Total	454	31.9	44.1	24.0
<u>Navy</u>				
E-1 to E-3	12	8.3	75.0	16.7
E-4 to E-6	213	34.7	36.6	28.6
E-7 to E-9	166	29.5	44.6	25.9
W-2 to W-4	12	25.0	41.7	33.3
O-1 to O-3	56	30.4	50.0	19.6
O-4 to O-6	119	20.2	58.8	21.0
Total	578	29.1	45.7	25.3
<u>Air Force</u>				
E-1 to E-3	23	34.8	47.8	17.4
E-4 to E-6	151	45.7	29.1	25.2
E-7 to E-9	90	42.2	40.0	17.8
O-1 to O-3	19	47.4	42.1	10.5
O-4 to O-6	15	13.3	66.7	20.0
Total	298	42.3	36.6	21.1
<u>Total</u>				
E-1 to E-3	45	24.4	60.0	15.6
E-4 to E-6	500	37.4	34.6	28.0
E-7 to E-9	426	36.6	40.4	23.0
W-1 to W-4	37	32.4	43.2	24.3
O-1 to O-3	108	31.5	51.9	16.7
O-4 to O-6	214	18.2	60.3	21.5
Total	1330	33.0	43.1	23.9

temporary lodgings on attitudes. Other predictors for the Air Force respondents were cost, temporary lodging effect on attitudes, personal safety and security, and play space for children.

In summary, the best single predictor of overall satisfaction with the comfort and adequacy of temporary lodgings was satisfaction with the size of those lodgings.

### Effects of the Temporary Lodging Experience

Respondents were asked the effects of their experience in temporary lodgings on their permanent housing choice and on their attitude toward living in a foreign location. Table I-19 presents these data for the accompanied respondents by pay grade group. It clearly shows that individuals in all three Services perceived the temporary housing experience to have more of an effect on their choice of permanent housing than on their attitude toward living in a foreign location. Of those who did report an effect, it was more negative than positive, particularly for the attitude toward living overseas item. No consistent differences were found across pay grade groups.

With the exception of Navy residents of economy temporary lodgings, for each Service and temporary housing type group, many more respondents reported negative than positive effects of their temporary lodging experiences. Table I-20 illustrates the differences in these perceived negative effects as a function of the last type of temporary lodgings occupied.

Negative effects of temporary lodgings were more evident in regard to choice of permanent housing than attitude toward living overseas in all Services and for both types of housing. More Army respondents in economy housing reported negative effects than did those in government housing. For the Air Force, the percentages were just about equal for the two housing types, as they were for Navy respondents with regard to attitude toward living overseas. There was a clear difference among Navy respondents in favor of economy housing with regard to effect on making a satisfactory permanent housing choice, however. Many pay grade groups were too small for separate analysis.

### Sponsor Program (Q143, Q144)

Respondents were asked two questions about their sponsors: one concerned the sponsor's attitude toward living conditions at the foreign location; and the second, helpfulness of the sponsor in assisting the respondent's family's adjustment to the new post.

Some respondents reported not having sponsors: 23.6 percent of the accompanied Army respondents and about 11 percent for the Navy and Air Force. Not having a sponsor was related to officer/enlisted status. Across Services, less than 5 percent of the officers did not have sponsors, while around 15 percent of the enlisted respondents in the Navy and Air Force and about one-third of the enlisted Army members had no sponsors.

Table I-21 shows the distribution of responses with respect to sponsors' attitudes and helpfulness for those who reported that they had sponsors.

3. Air Force. Because few Air Force members had been in government temporary lodgings, their responses should be interpreted with caution. Many of the aspects were rated about equally by the occupants of the two housing types, but regarding the few that did differ, government residents tended to be more satisfied. The one aspect on which government lodging earned a decided advantage was cost. In contrast to the Army responses that resulted in only laundry facilities getting mostly dissatisfied ratings from both groups of residents, Air Force people in both types of lodgings tended to be dissatisfied with their kitchens, laundries, play space, size of lodgings, and overall comfort and adequacy.

Across Services, residents of both government and economy temporary housing units were dissatisfied with laundry facilities. Except for the Army government housing occupants, all groups expressed overall dissatisfaction with the comfort and adequacy of their temporary residences.

Grouping the Satisfaction Items. A statistical procedure designed to develop meaningful groupings of individual items (factor analysis) was applied to the 11 satisfaction items. For all three Services, the results showed three groups of items (factors) accounted for the interrelationships among the 11 satisfaction items. The first group comprised 6 of the 11 items, including overall satisfaction with the comfort and adequacy of the temporary housing. The other items that were included in this group were safety and security, privacy, cleanliness, size of quarters, and cost. This grouping can be interpreted as a general feeling of satisfaction/dissatisfaction. The second group (factor) consisted of the two convenience items--convenience of the residence to the installation and to government facilities. The third group contained items dealing with specific lodging features. These items included kitchen appliances, laundry facilities, and play space for children. Since over half of the items clustered into the first group and the item content of the second and third groups was distinct from the first and from each other, the second and third groups can be interpreted as representing somewhat different issues than the first did.

In summary, the 11 items were best represented by three factors interpreted as overall satisfaction, satisfaction with convenience of the lodgings to the installation, and satisfaction with lodging features.

Predicting Overall Satisfaction. Another statistical method, multiple regression, was employed to determine what best predicts overall satisfaction with the comfort and adequacy of the temporary residence. In addition to the 10 individual satisfaction questions, selected demographic characteristics (i.e., children/no children, number of live-in dependents, pay grade group, type of temporary lodging, time in temporary lodging, and the perceived effects of temporary housing on choice of permanent housing and attitudes toward living overseas) were used in the analysis.

For both the Army and Navy samples, results showed that satisfaction with size of the temporary lodging was the most powerful predictor of overall satisfaction (correlations were .78 and .57 respectively). For the Air Force personnel, privacy was the best predictor of overall satisfaction, followed closely by size of the lodging (correlations of .54 and .53 respectively).

As to other predictors, for Army personnel the next best after size were kitchen features, cleanliness, privacy, convenience to post and government facilities, and perceived effects of temporary housing on attitudes toward living overseas. For Navy people, the next best predictors were cleanliness, privacy, cost, and the effect of

Table I-18  
Satisfaction with Aspects of Temporary Lodgings (Q112-Q122)

Aspect	Responses (%)					
	Government-owned/leased		Economy		Total	
	Dissat.	Sat.	Dissat.	Sat.	Dissat.	Sat.
<b>Army</b>	n = 165		n = 270		n = 435	
Q112: Personal safety/security	23.9	52.8	32.7	47.4	29.2	49.5
Q113: Privacy	36.1	48.8	40.1	43.4	38.3	45.6
Q114: Kitchen, eating and cooking facilities	38.7	53.3	53.0	34.8	45.5	44.7
Q115: Laundry facilities	62.5	28.6	67.2	16.0	64.5	22.6
Q116: Cleanliness	25.0	64.0	30.5	53.8	28.6	57.5
Q117: Play space for children	34.5	50.8	64.7	25.9	50.2	37.9
Q118: Size of quarters	31.5	60.0	63.6	24.2	51.5	37.8
Q119: Convenience of lodging to the installation	21.2	72.7	36.9	54.1	31.0	61.2
Q120: Convenience of lodging to government facilities	21.7	72.3	39.2	52.6	32.5	60.2
Q121: Overall comfort and adequacy	31.5	58.2	49.8	35.3	43.2	43.6
Q122: Cost	39.3	46.2	45.5	34.1	43.7	38.1
<b>Navy</b>	n = 40		n = 450		n = 490	
Q112: Personal safety/security	53.8	30.8	28.6	50.1	30.7	48.6
Q113: Privacy	37.5	40.0	39.6	41.2	39.8	40.7
Q114: Kitchen, eating and cooking facilities	63.6	27.3	55.3	26.0	56.4	25.9
Q115: Laundry facilities	69.2	15.4	72.7	14.5	71.9	15.1
Q116: Cleanliness	42.5	32.5	26.4	53.1	27.5	51.8
Q117: Play space for children	75.0	16.7	62.2	25.9	63.3	25.2
Q118: Size of quarters	61.0	26.8	60.5	26.7	60.6	26.6
Q119: Convenience of lodging to the installation	26.8	61.0	18.2	73.1	18.7	72.5
Q120: Convenience of lodging to government facilities	26.8	58.5	24.3	68.1	24.3	67.7
Q121: Overall comfort and adequacy	56.1	29.3	46.7	37.3	47.7	36.3
Q122: Cost	47.5	27.5	41.3	31.0	42.0	30.7
<b>Air Force</b>	n = 45		n = 240		n = 285	
Q112: Personal safety/security	44.7	42.6	35.8	37.9	37.4	38.4
Q113: Privacy	47.8	39.1	52.3	32.5	51.7	33.4
Q114: Kitchen, eating and cooking facilities	65.5	24.1	64.3	20.6	64.5	21.3
Q115: Laundry facilities	54.8	29.0	81.1	12.6	74.6	16.7
Q116: Cleanliness	42.2	51.1	38.5	44.7	39.0	45.9
Q117: Play space for children	65.4	26.9	71.4	18.5	69.9	19.9
Q118: Size of quarters	57.4	34.0	65.0	26.3	63.6	27.8
Q119: Convenience of lodging to the installation	22.7	68.2	22.8	64.2	22.7	64.9
Q120: Convenience of lodging to government facilities	21.3	70.2	22.0	65.3	21.8	66.2
Q121: Overall comfort and adequacy	57.8	31.1	55.3	29.5	55.5	30.0
Q122: Cost	27.5	52.5	46.5	34.9	43.6	37.6



Table I-17

Features Most Reported as Not Available (Q114-Q115, Q117)

Feature	Responses (%)					
	Army		Navy		Air Force	
	Government	Economy	Government	Economy	Government	Economy
Q114: Kitchen, eating and cooking facilities	16.0	52.7	37.1	48.1	32.6	43.8
Q115: Laundry facilities	30.0	52.2	29.7	40.7	24.4	57.8
Q117: Play space for children	17.3	40.8	20.0	28.9	16.1	37.7

these short stays. This indicates that Navy members tended to spend more time in temporary lodging than did those in the other Services. No strong or consistent differences were apparent by pay grade.

The number of days drawing temporary living allowance (TLA) generally paralleled the number of days in temporary housing. The relatively small differences found between time in temporary lodgings and time drawing TLA is probably a reflection of those living in government versus economy facilities.

### Opinions About Temporary Lodgings

#### Satisfaction With Aspects of Temporary Lodging

Respondents were asked to express their degree of satisfaction with 10 aspects of their last (or most recent) temporary residence during their current tour. For large majorities of respondents in all three services (61% Army, 92% Navy, 83% Air Force), this most recent temporary residence was civilian-owned housing.

Features Most Often Reported as Not Available. Certain kinds of features usually found in housing units were reported to be not available in the temporary lodgings. The percentages reporting unavailable features are shown in Table I-17 by Service and type of lodgings. The government category includes both government-owned and government-leased units.

Temporary lodgings in the economy more often lacked these typical housing features than did the government lodgings. However, government lodgings were also fairly frequently reported to be deficient.

Satisfaction Levels. Table I-18 shows the distribution of government and economy lodging residents' satisfaction ratings for the 10 aspects of the last temporary residence, as well as for the overall comfort and adequacy of that residence. The very and somewhat satisfied or dissatisfied categories were combined. Omitted from the table are the neither dissatisfied nor satisfied and the not available responses; therefore, the percentages shown do not sum to 100 percent.

1. Army. Differences were evident between respondents who had lived in government versus economy temporary lodgings and between Services. Among Army respondents, there was a strong tendency for higher satisfaction and lower dissatisfaction percentages for those who had lived in government temporary lodgings. In fact, regarding five of the aspects, government lodging residents were mostly satisfied, while economy lodging residents were mostly dissatisfied. Both groups agreed that they were mostly dissatisfied with their laundry facilities.

2. Navy. Again, because of the small number of Navy people who had been in government quarters, their responses should be interpreted cautiously. The overall pattern of Navy responses differed somewhat from those of the other Services. Like the Air Force, Navy respondents tended to have high dissatisfaction and low satisfaction with a lot of aspects. Both lodging type groups tended to be dissatisfied with their kitchens, laundries, play space, size of lodgings, cost of lodgings, and overall comfort and adequacy. Unlike the other Services, though, Navy respondents who had lived in economy temporary housing tended to report higher satisfaction (or lower dissatisfaction) than did those with government housing experience. Also, much more favorable patterns were apparent regarding personal safety and security and cleanliness in economy compared to government housing.

Table I-16

## Type of Temporary Lodgings Occupied and Preferred (Q105-Q106)

Pay Grade Group	n	Responses (%)				Disparity
		Government-owned/leased		Economy		
		Occupied	Preferred	Occupied	Preferred	
<u>Army</u>						
E-1 to E-3	11	63.6	72.7	36.4	27.0	9.1
E-4 to E-6	136	36.8	73.0	63.2	27.0	36.2
E-7 to E-9	171	14.5	64.9	85.5	35.1	50.4
W-1 to W-4	26	32.0	69.2	68.0	30.8	37.2
O-1 to O-3	33	39.4	84.8	60.6	15.2	45.4
O-4 to O-6	80	37.5	71.2	62.5	28.8	33.7
Total	457	29.1	70.4	70.9	29.7	
<u>Navy</u>						
E-1 to E-3	14	14.3	50.0	85.7	50.0	35.7
E-4 to E-6	211	5.2	61.8	94.8	38.2	56.6
E-7 to E-9	165	3.0	62.7	97.0	37.3	59.7
W-2 to W-4	12	16.7	58.3	83.3	41.7	41.6
O-1 to O-3	56	1.8	51.8	98.2	48.2	50.0
O-4 to O-6	119	0.8	55.5	99.2	44.5	54.7
Total	577	3.8	59.4	96.2	40.6	
<u>Air Force</u>						
E-1 to E-3	26	38.5	88.5	61.5	11.5	50.0
E-4 to E-6	151	9.9	78.3	90.1	21.7	68.4
E-7 to E-9	92	5.4	72.8	94.6	27.2	67.4
O-1 to O-3	18	0.0	83.3	100.0	16.7	83.3
O-4 to O-6	16	12.5	81.2	87.5	18.8	68.7
Total	303	10.6	78.0	89.4	22.0	

Across Services, the majority of all temporary lodging occupied upon service members' arrival in Italy was economy. The Army was the only Service with substantial percentages of respondents (29.1%) who occupied government-owned temporary housing. Clear majorities by Service and essentially all pay grade groups preferred government-owned temporary housing, however. Every one of the discrepancy figures in Table I-16 indicates a shortage (and frequently a substantial one) of government-owned units.

Days in Temporary Lodgings (Q107)/Time Drawing TLA (Q108)

Among those accompanied respondents who reported time spent in temporary lodgings, almost all (93% of Army to 98% of Air Force respondents) were in them for 90 days or less. The largest percentage (just under one-half) of the Army and Air Force members spent 30 days or less, while only about one-third of the Navy respondents had

### Temporary Housing (Q43)

Very few of the respondents were living in temporary lodging at the time of the survey--3.4 percent of the Army sample to 6.6 percent of the Air Force sample.

### Time Unaccompanied Before Arrival of Dependents

Table I-15 shows the percentage of service members who reported spending some time unaccompanied before the arrival of their dependents.

Table I-15

#### Time Unaccompanied Before Arrival of Dependents (Q104)

Weeks Unaccompanied	Army		Navy		Air Force		Total	
	n	%	n	%	n	%	n	%
None	308	65.8	476	82.6	241	79.0	1025	76.0
1 to 4 weeks	31	6.6	26	4.5	18	5.9	75	5.6
5 to 8 weeks	40	8.5	34	5.9	16	5.2	90	6.7
9 to 12 weeks	27	5.8	14	2.4	12	3.9	53	3.9
13 weeks or longer	62	13.3	26	4.6	18	6.0	106	7.8
Total	468	100.0	576	100.0	305	100.0	1349	100.0

The majority of respondents in all Services traveled concurrently with their dependents, but the percentage who did so was lower among Army respondents. Among those whose dependents followed later, the Army sample generally had a longer wait.

In all three Services, a higher proportion of the E-1 to E-3 group compared to the other pay grades had to wait for their dependents to arrive--between 36 percent (Navy) and 64 percent (Army).

### Actual and Preferred Types of Temporary Lodgings

Table I-16 shows the percentage of accompanied respondents that occupied government and economy temporary lodgings respectively when they arrived at their present post, base, or duty station, the percentages that preferred each type, and the disparity between those percentages for type occupied and preferred.

Government-owned and government-leased temporary lodgings are combined in the table due to the small number of respondents who occupied and preferred to occupy government-leased lodgings. In the Army sample, 4.2 percent occupied government-leased lodgings and 11.4 percent preferred them. In the Navy sample, less than 1 percent (0.9%) occupied them, while 15.7 percent indicated they would have preferred them. In the Air Force sample, 1.0 percent occupied them and 14.8 percent preferred government-leased temporary lodgings.

Table I-24

## Satisfaction with Waiting Time and Assignment and Referral Services (Q40-Q42)

Item	n	Responses (%)		
		Dissatisfied	Neutral	Satisfied
<u>Army</u>				
Q40: Length of wait for government housing	433	48.5	9.5	42.0
Q41: Referral services of the housing office	436	56.0	16.7	27.3
Q42: Assignment services of the housing office	462	48.3	16.9	34.8
<u>Navy</u>				
Q40: Length of wait for government housing	251	34.3	20.3	45.4
Q41: Referral services of the housing office	458	48.2	23.4	28.4
Q42: Assignment services of the housing office	359	40.4	27.3	32.3
<u>Air Force</u>				
Q40: Length of wait for government housing	116	59.5	10.3	30.2
Q41: Referral services of the housing office	286	56.7	25.2	18.1
Q42: Assignment services of the housing office	216	54.6	25.9	19.5

Across Services, there was more dissatisfaction than satisfaction with every one of the aspects with the exception of waiting time for government housing among the Navy respondents. There was somewhat more dissatisfaction overall among Army and Air Force members than among Navy people. Small numbers in many groups prevented analysis for potential differences by pay grade.

It should be noted that dissatisfaction with services of the housing office may not necessarily reflect on the efforts or organization of these offices. The characteristics of the housing market, availability of government housing, movement of service members and other factors may serve to make the housing office's tasks difficult to perform satisfactorily for many clients.

## SATISFACTION WITH PERMANENT HOUSING, FACILITIES, AND SERVICES

### Satisfaction Levels

In order to measure satisfaction, 33 questions were asked about various characteristics of the individual's present permanent residence, as well as about several services (e.g., recreational facilities, child care, public transportation). Included were two questions on overall satisfaction with adequacy and comfort of the residence, one for the service member and the other for the spouse. In this section, descriptive data on satisfaction, as well as on characteristics of the individual, housing, and experiences that are related to satisfaction, are presented. Again, these data represent the responses of the accompanied service members.

### Overall Satisfaction

Table I-25 shows overall satisfaction by Service for the service member and the spouse. (It is assumed that the service member answered for the spouse on the second item.)

Table I-25

Satisfaction with Overall Comfort and Adequacy of the Residence (Q88-Q89)

Respondent	n	Responses (%)		
		Dissatisfied	Neutral	Satisfied
<u>Army</u>				
Service member	598	33.3	11.5	55.2
Spouse	590	39.8	10.5	49.7
<u>Navy</u>				
Service member	646	29.3	15.3	55.4
Spouse	632	36.3	16.3	47.4
<u>Air Force</u>				
Service member	351	24.0	17.0	59.0
Spouse	338	36.7	12.4	50.9

Pluralities (55.2 to 59.0%) of service members and their spouses in the three Services were satisfied with their residences. Spouse satisfaction was somewhat less than service member satisfaction in all three Services. Air Force respondents reported satisfaction slightly more often than the Army and Navy members did for both themselves and their spouses.

### Overall Satisfaction by Pay Grade Group, Housing Type, and Household Composition

Table I-26 presents overall satisfaction for the accompanied service members and spouses by pay grade group.

Table I-26  
Overall Satisfaction by Pay Grade Group (Q88-Q89)

Service/Pay Grade Group	Service Member (%)			Spouse (%)				
	n	Dissatisfied	Neutral	Satisfied	n	Dissatisfied	Neutral	Satisfied
<u>Army</u>								
E-1 to E-3	15	26.7	20.0	53.3	15	33.3	20.0	46.7
E-4 to E-6	219	27.4	11.9	60.7	214	36.9	9.8	53.3
E-7 to E-9	206	37.9	11.7	50.5	203	42.9	9.9	47.2
W-1 to W-4	31	42.0	9.7	48.4	31	45.2	6.5	48.4
O-1 to O-3	40	35.0	15.0	50.0	40	40.0	15.0	45.0
O-4 to O-6	87	34.5	8.0	57.5	87	39.0	11.5	49.4
<u>Navy</u>								
E-1 to E-3	22	13.6	18.2	68.2	22	22.7	18.2	59.1
E-4 to E-6	239	27.6	16.7	55.7	232	33.6	19.0	47.4
E-7 to E-9	176	33.5	18.2	48.3	174	36.8	18.4	44.8
W-2 to W-4	16	31.3	6.3	62.4	16	43.8	0.0	56.3
O-1 to O-3	63	26.9	9.5	63.5	61	37.7	16.4	45.9
O-4 to O-6	130	30.0	12.3	57.7	127	40.9	10.2	48.9
<u>Air Force</u>								
E-1 to E-3	36	11.2	22.2	66.6	34	26.4	14.7	58.9
E-4 to E-6	170	23.0	22.9	54.1	160	37.5	17.5	45.0
E-7 to E-9	100	34.0	9.0	57.0	99	45.5	6.1	48.4
O-1 to O-3	19	15.8	15.8	68.4	19	21.1	10.5	68.4
O-4 to O-6	26	15.3	3.8	80.8	26	23.0	3.8	73.1

In all Services and pay grade groups, pluralities (some scant ones in the Army sample) of service members and spouses expressed satisfaction. The margins of satisfaction over dissatisfaction were slimmest among Army warrant officers and the spouses of E-7 to E-9s and warrant officers. Across Services, satisfaction tended to be highest among those at the highest and lowest ends of the pay grade range.

Another factor that was hypothesized to affect overall satisfaction was the type of housing, especially whether one lived in government-owned housing (usually on the post, base, or duty station) or in government-leased and economy housing. Table I-27 shows the relationship between type of housing and overall satisfaction.

The extremely small numbers of Navy respondents in government-owned and Air Force respondents in government-owned and government-leased housing mean that their responses should not be compared to their counterparts in the Army or to the rest of their respective Service's respondents. Among the Army sample, satisfaction ratings of those in government-owned and economy housing were substantially equivalent at a level noticeably higher than those in government-leased housing. The average satisfaction rating for government-leased housing residents was lower by a statistically significant amount than for the other housing types. Satisfaction levels of Navy members in government-leased and economy housing were about the same. Because of the small sample size problem in the Navy and Air Force data, it is impossible to say whether or not type of housing unit has a consistent relationship across Services with overall satisfaction with housing adequacy and comfort.

It was also hypothesized that having children living with them would influence overall satisfaction with the residence, since children may create housing and other needs that may be difficult to satisfy adequately. The data for all three Services show a slight but consistent tendency for those without children to have higher overall satisfaction than those with children living with them. This difference was seen for both service member and perceived spouse satisfaction.

Prediction of Overall Satisfaction. In order to predict overall satisfaction with the comfort and adequacy of service member's residences, multiple regression analyses were performed on each service sample. Included as predictor variables were all the items dealing with satisfaction with permanent housing, service and facilities (except spouse overall satisfaction), pay grade group, whether or not the service member had children living with him/her, number of live-in dependents, and effects of temporary housing experience. Because this analysis was based only on the data from those respondents who answered every question in the predictor variable set, the usable sample size became very much smaller than the initial sample size. Therefore, the relatively small sample sizes in each of the three services prevented analysis on subsets of the service samples (i.e., by type of housing).

Tables I-28, I-29, and I-30 present the individual variables that best (in combination) predicted overall service member satisfaction, in order of their predictive value. The R at the bottom of Table I-28 is the multiple regression coefficient for each service. This is an indicator of the degree of predictability of the criterion (overall satisfaction) from the combination of the variables shown. The coefficients (Rs) show that responses to the overall satisfaction items were well predicted by the best combinations of the variables, since 1.00 is the maximum R possible.



Table I-27

## Overall Satisfaction by Housing Type (Q88-Q89, Q44)

Service/ Housing Type	Service Member (%)			Spouse (%)				
	n	Dissatisfied	Neutral	Satisfied	n	Dissatisfied	Neutral	Satisfied
<u>Army</u>								
Government-owned	148	30.3	11.5	58.2	146	39.7	9.6	50.7
Government-leased	136	45.6	11.8	42.6	123	51.1	10.5	38.4
Economy	313	29.4	11.5	59.1	307	35.2	11.0	53.9
<u>Navy</u>								
Government-owned	6	50.0	16.7	33.3	5	66.6	16.7	16.7
Government-leased	132	28.7	15.2	56.1	129	32.6	16.3	51.1
Economy	506	29.0	15.4	55.5	488	36.8	16.3	46.9
<u>Air Force</u>								
Government-owned	17	47.1	17.6	35.3	16	68.6	6.3	25.1
Government-leased	17	52.9	5.9	41.2	16	62.5	6.3	31.2
Economy	316	21.2	17.7	61.1	300	33.8	13.1	53.1

Table I-28

Variables Contributing Most to Prediction (Description) of  
Overall Satisfaction with the Residence: Army

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Satisfaction with privacy  
Satisfaction with adequacy of electrical service  
Satisfaction with bedroom sizes  
Satisfaction with convenience to medical dispensary  
Effect of temporary lodging experience on living overseas  
Satisfaction with housing costs  
Satisfaction with government furniture  
Satisfaction with accessibility of public transportation  
Satisfaction with overall size of residence

$R = .82$

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Table I-29

Variables Contributing Most to Prediction (Description) of  
Overall Satisfaction with the Residence: Navy

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Satisfaction with external appearance of residence  
Satisfaction with residence size  
Satisfaction with utility costs  
Satisfaction with overall comfort and adequacy of temporary residence  
Satisfaction with hot water supply  
Satisfaction with convenience to government facilities  
Satisfaction with accessibility of public transportation  
Satisfaction with convenience to playyards/playgrounds  
Satisfaction with privacy  
Current type of housing  
Satisfaction with adequacy of electrical service

$R = .83$

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Table I-30

Variables Contributing Most to Prediction (Description) of  
Overall Satisfaction with the Residence: Air Force

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Satisfaction with residence size  
 Satisfaction with personal safety and security  
 Satisfaction with convenience to medical dispensary  
 Satisfaction with privacy  
 Satisfaction with adequacy of the heating system  
 Satisfaction with government furniture  
 Satisfaction with laundry facilities  
 Satisfaction with maintenance and repair service  
 Effect of temporary lodging experience on permanent housing choice

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R = .87

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Tables I-28, I-29, and I-30 show considerable differences between Services, which may have been due to influences other than service membership alone. For example, Army respondents were fairly evenly distributed among the three housing types (government-owned, government-leased, and economy), the Navy respondents were essentially all in either government-leased or economy housing, and the Air Force respondents were concentrated in economy housing. Further, the members of the three Services tended to be located in different parts of Italy. It is likely that factors such as these had much to do with the different patterns of influences on overall housing satisfaction.

Satisfaction With Aspects of Housing, Facilities, and Services

Grouping the Satisfaction Items. The 33 satisfaction items (including service member and spouse satisfaction) were input to factor analysis in order to determine the basic dimensions involved in the concept of overall housing satisfaction. The results showed a great deal of consistency across Services. In general, five groupings of items (factors) were found for all three Services, as shown in Table I-31.

The overall satisfaction items (both service member and spouse) were part of both the structural aspects and the immediate physical/psychological surroundings groupings. It appears that five distinct groupings (with some overlap of individual items) of satisfaction are present in the data. Satisfaction is, therefore, multidimensional and involves satisfaction with structural aspects of the residence, operating systems, location, recreational facilities for children, and the immediate physical/psychological surroundings of the residence (e.g., security, privacy, appearances).

Army Responses to Satisfaction Items. Thirty-one items asked respondents to rate their satisfaction with specific aspects of their residences, facilities, and services. The following tables show the distribution of responses to these items, arranged in descending order of the percentage dissatisfied. Table I-32 presents the data for items that were applicable to most respondents (less than 10% reporting not applicable). Table I-33

Table I-31  
Groupings of Satisfaction Items (Q57-Q89)

Groupings (Items)
<b>STRUCTURAL ASPECTS OF THE RESIDENCE</b> (Including satisfaction with residence size, number of rooms, and service member and spouse overall satisfaction with the comfort and adequacy of the residence).
<b>SYSTEMS/MAINTENANCE/COSTS</b> (Including satisfaction with kitchen, laundry, hot water, heating, and electrical systems, repair and maintenance, and utility and housing costs).
<b>LOCATION/CONVENIENCE</b> (Including satisfaction with convenience of residence to installation, government facilities, dispensary and major medical facilities, availability of child care, and transportation time for children being bused to school, and accessibility of the residence to public transportation.).
<b>RECREATIONAL FACILITIES FOR CHILDREN</b> (Including satisfaction with availability, number, and convenience to recreational facilities for children and teenagers).
<b>IMMEDIATE PHYSICAL-PSYCHOLOGICAL SURROUNDINGS</b> (Including satisfaction with external appearance of residence, appearance of neighborhood, personal security, privacy, repair and maintenance service, and service member and spouse overall satisfaction).

presents data for items that were not applicable to 10 percent or more. These latter items applied mainly to respondents living in economy housing and/or having dependent children living with them. Separating the two sets of items puts the percentages satisfied and dissatisfied into a more realistic perspective than if the "not applicable" were eliminated in computing the percentages.

In the Army sample, more of the respondents were satisfied than were dissatisfied with the majority of the aspects listed in Table I-32. For the first five aspects listed, though, more people were dissatisfied than were satisfied. More respondents were dissatisfied than were satisfied with all of the items listed in Table I-33 except for the last two.

Pay grade group showed statistical relationships to only two items. Generally, satisfaction with cost of housing was negatively related to pay grade. The O-4 to O-6 group was significantly more dissatisfied with housing cost than the E-4 to E-6 group was. For satisfaction with the number of recreational facilities for preteens, this trend was reversed, with E-4 to E-6 groups significantly more dissatisfied than the O-4 to O-6 groups.

Table I-32

## Satisfaction with 22 Aspects of Housing, Facilities, and Services (Q57-Q87): Army

Housing/Facility/Service Aspect	Responses (%)			
	N/A	Dissatisfied	Neutral	Satisfied
Q69: Heating system adequacy	0.8	61.2	7.3	30.7
Q84: Convenience of residence to major medical facilities	0.3	50.3	10.6	38.8
Q68: Hot water supply	0.2	46.1	7.9	45.8
Q67: Water purity	0.5	45.8	13.8	39.9
Q72: Maintenance/repair services on residence	7.0	40.7	13.7	38.6
Q58: Bedroom size(s)	0.0	40.5	5.5	54.0
Q66: Adequacy of electric service	1.3	39.0	12.8	46.9
Q59: Living/dining room size	0.0	36.9	8.2	54.9
Q64: Laundry facility adequacy	4.4	36.8	8.0	50.8
Q57: Overall size of residence	0.0	36.0	6.6	57.4
Q82: Convenience of residence to government facilities	0.7	34.8	11.2	53.3
Q81: Convenience of residence to installation	0.7	34.5	10.5	54.3
Q74: Degree of privacy	0.2	34.2	11.0	54.6
Q83: Convenience of residence to dispensary/clinic	0.8	33.3	12.0	53.9
Q61: Number of bathrooms	0.0	31.6	7.5	60.9
Q63: Number of kitchen appliances furnished	6.4	31.0	11.9	50.7
Q62: Operating condition of kitchen appliances	3.9	30.2	10.4	55.5
Q73: Personal safety/security	0.5	28.6	12.0	58.9
Q87: Accessibility to public transportation	2.3	28.4	16.5	52.8
Q76: Neighborhood appearance	0.0	27.0	17.6	55.4
Q60: Number of bedrooms	0.0	25.0	9.6	65.4
Q75: External appearance of residence	0.0	24.7	14.8	60.5

Table I-33

Satisfaction with Aspects Not Applicable to 10 Percent  
or More of the Respondents (Q57-Q87): Army

Housing/Facility/Service Aspect	Responses (%)			
	N/A	Dissatisfied	Neutral	Satisfied
Q80: Convenience of residence to youth activity centers	17.8	50.2	10.9	21.1
Q78: Number/availability of recreation for preteens	20.4	49.8	8.7	21.1
Q79: Convenience of residence to playgrounds	13.5	45.2	8.2	33.1
Q65: Availability/quality of government furniture	10.5	45.1	16.2	28.2
Q77: Number/availability of recreation for teens	30.7	42.1	9.8	17.4
Q85: Availability of child care services/facilities	21.7	34.1	16.6	27.6
Q70: Utility costs	33.6	32.0	14.1	20.3
Q71: Housing costs	26.8	26.4	12.8	34.0
Q86: Transportation time for children bused to school	25.3	21.1	14.4	39.2

Presence or absence of children in the home was related statistically to responses to five items for the Army sample: bedroom number and size, adequacy of electrical service, convenience to major medical facilities, and spouse overall satisfaction. In each case, those without children were significantly more satisfied than those with children.

The most powerful differences on the satisfaction items were a function of the type of housing. Table I-34 shows the percentages of respondents dissatisfied and satisfied with aspects of their housing, facilities, and services by the three major housing types.

For 30 of the items, response patterns differed significantly by type of housing. The items dealing with utilities and convenience of location were marked by significantly higher satisfaction among residents of government-owned housing. Those in economy housing rated housing and room size, privacy, and appearance of neighborhood significantly higher, while they rated number of appliances, laundry facilities, electrical service, and cost of housing lowest of all groups. Those in government-leased housing were lowest only for purity of water, teen recreational facilities, and, most significantly, overall satisfaction on the part of both service member and spouse.

Table I-34

Satisfaction with Aspects of Housing, Facilities, and Services (Q57-Q87) by Housing Type (Q44): Army

Item	Responses (%)					
	Government-owned (n = 148)		Government-leased (n = 136)		Economy (n = 310)	
	Dissat.	Sat.	Dissat.	Sat.	Dissat.	Sat.
Q57: Overall size of residence	51.4	39.9	50.0	47.8	22.6	70.3
Q58: Bedroom size(s)	64.9	30.4	49.3	47.1	25.5	68.1
Q59: Living/dining room size	43.9	45.3	52.9	44.1	26.8	63.5
Q60: Number of bedrooms	31.8	56.8	28.9	59.3	19.7	72.3
Q61: Number of bathrooms	50.0	43.9	24.3	68.4	25.2	66.5
Q62: Operating condition of kitchen appliances	27.3	60.7	34.3	54.0	29.4	53.7
Q63: Number of kitchen appliances furnished	22.7	66.0	27.9	59.6	36.4	39.0
Q64: Adequacy of the laundry facilities	8.7	84.7	39.4	51.8	49.0	34.3
Q65: Availability/quality of government furniture	25.3	49.3	48.2	28.5	52.9	17.6
Q66: Adequacy of electrical service	30.4	56.8	34.6	52.2	45.2	40.3
Q67: Purity of the water	25.0	60.8	64.0	22.1	48.1	37.4
Q68: Hot water supply	21.6	71.6	50.7	42.6	55.2	35.2
Q69: Adequacy of heating system (including insulation)	68.2	24.3	41.9	50.7	66.3	25.2
Q70: Cost of utilities <sup>a</sup>	0.7	19.5	4.4	17.6	58.7	21.2
Q71: Cost of housing <sup>a</sup>	18.8	17.4	20.6	16.9	32.3	49.2
Q72: Maintenance/repair services on residence	28.2	49.0	43.1	37.2	45.4	34.2
Q73: Personal safety/security	10.1	77.7	37.5	52.2	33.5	52.3
Q74: Degree of privacy	46.6	44.6	49.3	39.0	21.3	66.1
Q75: External appearance of the residence	27.0	60.1	32.4	58.8	19.0	62.3
Q76: Appearance of the neighborhood	33.1	53.4	34.6	49.3	20.0	59.4
Q77: Number/availability of recreational facilities for teenage children <sup>a</sup>	23.3	38.7	64.2	7.3	41.9	11.5
Q78: Number/availability of recreational facilities for preteen children <sup>a</sup>	28.0	47.3	67.2	13.9	52.7	11.8
Q79: Convenience of residence to playgrounds	10.0	71.3	56.2	31.4	57.8	15.3
Q80: Convenience of residence to youth activity centers	17.3	52.0	70.8	10.2	57.5	10.5
Q81: Convenience of residence to the installation	5.4	85.8	50.0	40.4	41.9	45.2
Q82: Convenience of residence to government facilities	4.7	87.2	52.9	38.2	41.3	43.9
Q83: Convenience of residence to medical dispensary/clinic	6.8	83.1	45.6	43.4	40.6	44.5
Q84: Convenience of residence to major medical facilities	27.0	60.1	66.2	25.7	55.3	33.7
Q85: Availability of child care services and facilities <sup>a</sup>	19.3	50.0	41.6	29.2	37.7	16.6
Q86: Transportation time for children bused to school <sup>a</sup>	2.0	76.0	26.3	32.8	27.5	24.9
Q87: Accessibility of public transportation	11.3	75.3	33.6	46.7	34.5	43.8

<sup>a</sup>Not applicable to 10 percent or more of the respondents.

Navy Responses to Satisfaction Items. Tables I-35 and I-36 present the Navy satisfaction data.

Table I-35

Satisfaction with 19 Aspects of Housing, Facilities, and Services (Q57-Q87): Navy

Housing/Facility/Service Aspect	Responses (%)			
	N/A	Dissatisfied	Neutral	Satisfied
Q69: Heating system adequacy	1.2	72.1	6.7	20.0
Q84: Convenience of residence to major medical facilities	1.2	71.5	10.9	16.4
Q66: Adequacy of electric service	0.2	68.5	9.4	21.9
Q82: Convenience of residence to government facilities	0.3	56.1	15.1	28.5
Q68: Hot water supply	0.2	53.8	10.1	35.9
Q72: Maintenance/repair services on residence	3.0	51.7	16.6	28.7
Q73: Personal safety/security	0.0	50.1	10.2	39.7
Q81: Convenience of residence to installation	0.5	50.0	14.7	34.8
Q87: Accessibility of public transportation	4.1	41.8	25.6	28.5
Q67: Water purity	0.0	40.0	16.6	43.4
Q76: Neighborhood appearance	0.0	38.4	16.0	45.6
Q83: Convenience of residence to dispensary/clinic	0.3	37.8	17.5	44.4
Q74: Degree of privacy	0.0	28.6	12.3	59.1
Q75: External appearance of residence	0.0	25.9	14.8	59.3
Q58: Bedroom size(s)	0.0	21.5	6.1	72.4
Q57: Overall size of residence	0.1	18.4	5.2	76.3
Q59: Living/dining room size	0.3	17.3	7.0	75.4
Q61: Number of bathrooms	0.2	16.3	5.6	77.9
Q60: Number of bedrooms	0.1	13.4	9.7	76.8



Table I-36

Satisfaction with Aspects Not Applicable to 10 Percent  
or More of the Respondents (Q57-Q87): Navy

Housing/Facility/Service Aspect	Responses (%)			
	N/A	Dissatisfied	Neutral	Satisfied
Q80: Convenience of residence to youth activity centers	23.8	61.0	7.9	7.3
Q79: Convenience of residence to playgrounds	21.8	60.8	7.1	10.3
Q64: Laundry facility adequacy	14.6	57.3	10.8	17.3
Q78: Number/availability of recreation for preteens	28.0	55.7	6.5	9.8
Q77: Number/availability of recreation for teens	35.4	49.6	7.7	7.3
Q70: Utility costs	12.9	48.8	19.8	18.5
Q63: Number of kitchen appliances furnished	21.6	43.4	9.2	25.8
Q85: Availability of child care services/facilities	30.8	38.0	14.7	16.5
Q62: Operating condition of kitchen appliances	12.3	34.6	11.2	41.9
Q86: Transportation time for children bused to school	36.3	29.6	14.5	19.6
Q71: Housing costs	10.0	29.4	17.9	42.7
Q65: Availability/quality of government furniture	47.4	25.7	15.7	11.2

For the Navy respondents, the first nine items listed in Table I-35 received more dissatisfied than satisfied responses. This number was barely balanced out by the 10 remaining items that were given satisfaction ratings by pluralities of the respondents. The top three dissatisfiers, clearly outdistancing the rest, were heating system adequacy, convenience of major medical facilities, and electrical system adequacy.

In Table I-36, satisfaction with items for which 10 percent or more respondent "not applicable" showed Navy people more dissatisfied than satisfied with 8 of the 12 items listed. Four of the top five dissatisfiers related to recreational facilities for children.

Pay grade group was statistically related to responses to five of the satisfaction items. For three location convenience items, generally enlisted people were significantly more dissatisfied than were the senior officers. In a reversal, enlisted people were significantly more satisfied than senior officers with the cost of housing and with the kitchen appliances that were furnished.

The presence or absence of children was related to responses to nine satisfaction items. Service members without children were significantly more satisfied than those with children with aspects of the size of the residence, maintenance and repair services,

personal security, and convenience of recreational facilities for children. Spouses of service members without children were also significantly more satisfied overall.

As with the Army data, type of housing was responsible for the greatest number of significant differences in response patterns of Navy respondents. Since hardly any Navy people occupied government-owned housing, Table I-37 shows the percentages of respondents who were dissatisfied and satisfied with aspects of their housing, facilities, and services by two of the three major housing types (government-leased and economy housing).

Those in economy housing were significantly more satisfied with aspects related to the external neighborhood and convenience of location, while those in government-leased housing were significantly more satisfied with the size of the housing unit, condition of furnishings, and adequacy of utilities and maintenance service. Remember that hardly any Navy people occupied government-owned housing.

Air Force Responses to Satisfaction Items. Tables I-38 and I-39 present the satisfaction data for the Air Force sample.

Table I-38 shows that only the first four items listed were given more dissatisfied than satisfied ratings by the Air Force respondents. The top two, heating system adequacy and convenience to major medical facilities, received huge dissatisfaction ratings that indicated serious inadequacies were perceived. In Table I-39, all but the last two items had more dissatisfaction than satisfaction ratings. The dissatisfaction list was led off strongly by the items dealing with recreation facilities for children and government furniture.

Pay grade group was related statistically to responses to seven of the satisfaction items. In general, the enlisted pay grades were less satisfied than the officer groups. The items on which these statistically significant differences were found included size of residence, government furniture, convenience to the dispensary and to recreational facilities for children, and spouse's overall satisfaction.

Presence or absence of children was strongly and consistently related to 10 of the 31 items. The pattern of responses was uniform, just as it was for Army and Navy respondents. People without children were more satisfied than those with children. The items on which significant differences were found included those concerning the size of the residence, government furniture, cost of housing, convenience to the installation and dispensary, and spouse and service member overall satisfaction.

Because almost all Air Force respondents lived in economy housing, no analysis by housing type was performed.

#### Usage of Facilities

A series of items addressed the reliance of service members and their families on either government or economy facilities by asking whether or not the facilities were available as well as their typical level of usage. Usage was categorized as always or mostly use economy facilities, use about half economy and half government, and mostly or always use government facilities. Table I-40 summarizes the responses for the nine listed facilities for each Service. The percentages do not sum to 100 percent because the does-not-apply and not-available categories were omitted.

### Army Response Differences by Pay Grade Group, Housing Type, and Household Composition

Table I-48 shows the percent of each pay grade group selecting the improvements chosen by at least 28 percent of all the Army respondents. The numbers in parentheses are the percentages of the total service sample that picked that area.

Family housing was the improvement area selected most frequently by all pay grade groups in the Army with 52 to 92 percent of each group selecting it. There were very few differences among the pay grade groups for the areas selected for needed improvement. Some of the differences found were that commissaries was chosen as a needed area of improvement more often by the lower enlisted grades than by the other groups. Parking (facilities) was not chosen as often by high ranking officers as by the lower pay grade groups. However, because of the small number of respondents in many of the groups, these differences are representative only of the sample and not necessarily the population.

Army personnel who lived in government-owned housing were more likely than those in economy or government-leased housing to choose troop barracks, parking facilities, and work areas as areas of needed improvement. Those living in economy or government-leased housing were more likely to see exchanges and/or commissaries as one of their four most important areas for improvement. Another finding was that those in economy housing were more likely than those in government-owned or government-leased housing to select child care as an area of needed improvement.

The presence or absence of children living in the household was related to choice of two areas of needed improvement. The areas dealing directly with children (youth facilities and child care) showed a higher percentage of those with children choosing the items.

### Navy Response Differences by Pay Grade Group, Housing Type, and Household Composition

Table I-39 shows the percent of each pay grade group selecting the improvements chosen by at least 28 percent of all Navy respondents. Among the eight most frequently selected improvement areas in the Navy, there were relatively few consistent, strong differences as a function of pay grade level. The junior grade officers did not select family entertainment as a needed improvement area as often as other pay grades did. Senior enlisted people selected youth facilities as an area needing improvement more so than the other pay grades. Again, the junior enlisted sample and the warrant officer sample are both too small on which to make inferences to the population.

The number of Navy respondents who occupied government-owned housing was very small (less than 1% of the sample).

The presence or absence of children living in the household was related to choice of a few areas of needed improvement. The two areas dealing directly with children (youth facilities and child care) showed a higher percentage of those with children choosing the items. In the Navy sample, parking (facilities) was selected more often as an area of needed improvement by those without children. A difference found only in the Navy sample was that those without children selected work areas more often than those with children.

Table I-47 shows the percentage of respondents in each Service who selected each of the 14 areas of needed improvement among their four choices. The rank number indicates the order of popularity in terms of the percentage selecting the area of improvement; one represents the area of improvement selected most and 14 represents the area of improvement selected least.

Table I-47  
Choices of Improvements Needed (Q123-Q1260)

Improvement	Army		Navy		Air Force	
	%	Rank	%	Rank	%	Rank
Family housing	58.4	1	44.4	2	61.0	2
Medical facilities	48.2	2	43.5	3	72.2	1
Commissaries	42.3	3	43.4	4	32.0	4
Parking facilities	33.1	4	50.5	1	19.1	10
Troop barracks, dorms	28.9	5	9.8	12	15.7	11
Temporary lodging facilities	28.9	6	31.8	6	39.3	3
Family entertainment facilities	27.7	7	31.0	7	29.2	6
Exchanges	26.0	8	33.4	5	20.5	9
Work areas	23.4	9	23.7	9	26.7	7
Recreation facilities	23.1	10	23.1	11	30.1	5
Dental facilities	19.5	11	6.1	13	15.4	12
Child care facilities	19.4	12	24.7	10	10.1	13
Youth facilities	17.0	13	30.0	8	23.9	8
Religious facilities	2.5	14	3.1	14	4.2	14

Across all three Services, there was a consistent perception of need for improved family housing. Other frequently chosen areas for improvement across all three Services were medical facilities and commissaries. Areas selected least often as needing improvement were religious, child care, and dental facilities.

Parking was chosen very often by those in the Navy (50.5% of Navy personnel chose this area for improvement), whereas the Air Force sample did not tend to choose this category. The Air Force respondents appeared to have a larger concern with temporary lodging facilities and recreational facilities than did the Army or Navy. Lastly, the Army chose improvements for troop barracks and dorms more frequently than the other services.

None of the analyses up to now have included unaccompanied service members, who are considered with special groups (p. 240).

### Reporting of the Most Serious Problem (Q140)

The first problem selected of the three was labelled "most serious." Table I-46 presents the problems most frequently selected as most serious. Each of the 21 problems listed would be expected to show approximately 5 percent selection if choices were made randomly or if each individual's problems were different and unique from everyone else's. Only percentages greater than 5 percent are reported.

Table I-46  
"Most Serious" Problems for Each Service (Q140)

Problem	Responses (%)		
	Army	Navy	Air Force
Initial housing costs	8.2	10.2	21.9
Language and cultural differences	8.2	10.3	10.2
Permanent housing	12.3	5.3	9.1
Working conditions	6.9	8.2	7.8
Medical/dental care	9.0	--	11.5
Security	--	19.3	--
Local telephone service	7.6	5.9	--
Spouse employment	7.4	--	5.3
Transportation	5.3	5.5	--
Shipping/storage of household goods	5.5	--	--

Initial housing costs, language and cultural differences, permanent housing and working conditions were frequently selected in all three Services. Medical/dental care and spouse employment were selected by the Army and Air Force samples as among the most serious problems. Local telephone service represents a slight problem for the Army and the Navy samples. A unique problem for the Navy is security. The Army selected shipping and storage problems more often than the other Services did.

### **IMPROVEMENTS NEEDED**

Respondents were asked to select four areas from a list of 14 for which they believed construction, expansion, leasing, or renovation was needed to improve living and working conditions at their current location. The list included some areas that were also listed as problems (e.g., child care, recreation, medical care, temporary lodgings, family housing) and some new ones (e.g., exchanges, commissaries, troop barracks, parking facilities).

#### Overall Choices of Improvements Needed

If respondents had chosen randomly from the list, approximately 28 percent would have selected each area (4 out of 14). Therefore, 32 percent or more and 24 percent or less selecting an area represent statistically meaningful indications of choice and non-choice.

The number of respondents in the Navy who occupied government-owned housing was very small (less than 1% of the sample).

### Air Force

Table I-45 presents problems by pay grade group for the Air Force sample.

Table I-45  
Problems by Pay Grade Group: Air Force

Problem (% Overall)	Responses (%)				
	E-1 to E-3 (n = 40)	E-4 to E-6 (n = 160)	E-7 to E-9 (n = 102)	O-1 to O-3 (n = 18)	O-4 to O-6 (n = 19)
Initial housing costs (49.3)	25.0	54.5	49.0	55.6	47.4
Medical/dental care (32.7)	30.0	31.8	35.3	44.4	21.1
Spouse employment (24.5)	42.5	29.0	14.7	11.1	10.5
Language and cultural differences (23.1)	35.0	21.6	22.5	11.1	26.3
Permanent housing (20.3)	7.5	23.3	20.6	33.3	5.3
Living expenses (19.7)	20.0	23.9	13.7	27.8	5.3
Working conditions (19.2)	25.0	18.8	18.6	22.2	10.5
Local telephone service (18.3)	22.5	14.8	20.6	22.2	26.3

The E-1 to E-3 group was less likely than other pay grade groups to report initial housing costs as among the most serious problems faced. In fact, with the exception of the E-1 to E-3 pay grade group, initial housing costs was the most frequently selected problem of all pay grade groups in the Air Force. Spouse employment and language/cultural differences were reported as problems more often by the junior enlisted than by most other groups. Senior officers reported living expenses and working conditions less often than did all other groups. Permanent housing was chosen less frequently by the E-1 to E-3 and O-4 to O-6 groups than it was by those in the middle pay grades.

For Air Force personnel, initial housing costs presented a major problem for those with children. Fifty-three percent of the respondents with children chose this as one of the most serious problems compared to just 32 percent of those without children. Another difference found in the Air Force sample dealt with shopping facilities. Only 1 percent of the personnel with children chose this problem as serious compared to 13 percent of the personnel without children.

As practically all the respondents in the Air Force sample were in economy housing, no housing type comparisons could be made for this Service.

Table I-44

## Problems by Pay Grade Group: Navy

Problem (% Overall)	Responses (%)					
	E-1 to E-3 (n = 21)	E-4 to E-6 (n = 228)	E-7 to E-9 (n = 174)	W-1 to W-4 (n = 15)	O-1 to O-3 (n = 58)	O-4 to O-6 (n = 120)
Security (40.3)	57.1	34.6	39.1	33.3	43.1	49.2
Local telephone service (30.8)	33.3	32.0	29.3	40.0	36.2	26.7
Initial housing costs (26.9)	28.6	22.8	29.9	13.3	36.2	27.5
Language and cultural differences (22.9)	23.8	27.6	23.0	20.0	12.1	19.2
Working conditions (18.0)	28.6	24.6	14.4	20.0	5.2	9.2
Spouse employment (17.5)	14.3	22.8	16.1	13.3	17.2	10.8
Transportation (17.4)	9.5	21.9	21.8	20.0	5.2	9.2
Utility services (16.9)	19.0	11.8	13.2	40.0	22.4	25.8

Local telephone service, spouse employment, initial housing costs, and permanent housing were major problem areas for all Army personnel, regardless of pay grade group. Spouse employment was the major problem area chosen by all enlisted Army personnel. Senior enlisted personnel (E-7 to E-9) reported temporary lodging more than other pay grade groups did. Permanent housing was chosen much more often as a serious problem by senior commissioned officers and warrant officers than by the other pay grade groups. With the exception of warrant officers, language and cultural differences represented a problem to all Army personnel in Italy. Junior commissioned officers appeared to be very concerned with working conditions.

In the Army sample, only one relationship was found between problems selected and household composition: Those without children reported spouse employment much more often as one of the most serious problems. The Army personnel with children reported spouse employment only 24.1 percent of the time as compared to those without children who reported this problem 41.5 percent of the time.

Many relationships between housing type and problems selected as most serious were found in the Army sample. The following problems were reported more often by those living in government-owned housing than by those living in government-leased or economy quarters: (1) shipping and storing of household goods, (2) language and cultural differences, and (3) temporary lodging facilities. Problems reported more often by Army personnel living in economy housing included security and living expenses (and initial housing costs as mentioned above). On the other hand, those living in economy housing chose the following problems less often as the most serious than did those in government-owned or government-leased: (1) spouse employment, (2) local telephone services, and (3) permanent housing.

### Navy

Table I-44 shows the problems most frequently reported by the Navy sample, broken down by pay grade group. With the exception of the warrant officers, security was the most frequently selected problem in all pay grades. It appears to be an especially big problem for the junior enlisted members and the senior officers, with approximately half of those two groups reporting security as one of the most serious problems in Italy. Working conditions was one of the most frequently reported problems for enlisted and warrant officer members; however, commissioned officers did not appear to be concerned with this issue. The same situation was found for transportation problems (with the exception of the E-1 to E-3 group). The lower-grade Navy personnel considered it to be a problem, whereas the commissioned officers did not. Utility services was the problem selected most often by warrant officers, but, as mentioned previously, no conclusions should be drawn from this finding due to the small sample size.

In the Navy sample, many statistical differences were found between those with and without children and the serious problem areas selected. As was true with the Army personnel, spouse employment was a bigger concern for those without children than for those with children in the household. Another problem reported more often by Navy personnel without children in the household was separation. This may be due to their children being placed in boarding schools or being left in CONUS. For those with children, child care and schools were of course chosen more often as serious problems than for those without children.

In the Navy sample, the following differences were found between those living in economy housing and those living in government-leased properties. Both initial housing costs and utility services were reported more often by those in economy housing than by those occupying government-leased housing. Service members occupying government-leased housing reported transportation as a more serious problem than did those in economy housing.



Table I-43

## Problems by Pay Grade Group: Army

Problem (% Overall)	Responses (%)					
	E-1 to E-3 (n = 14)	E-4 to E-6 (n = 280)	E-7 to E-9 (n = 200)	W-1 to W-4 (n = 28)	O-1 to O-3 (n = 35)	O-4 to O-6 (n = 75)
Local telephone service (27.7)	21.4	31.3	26.5	17.9	34.3	22.7
Spouse employment (26.1)	50.0	27.9	27.5	28.6	20.0	14.7
Initial housing costs (24.8)	28.6	24.0	25.5	25.0	20.0	26.7
Permanent housing (23.6)	14.3	19.7	24.0	32.1	14.3	36.0
Medical/dental care (23.0)	7.1	25.0	21.0	32.1	22.9	22.7
Language and cultural differences (22.5)	28.6	26.9	16.0	10.7	25.7	29.3
Working conditions (16.4)	28.6	15.9	15.0	17.9	31.4	12.0
Transportation (15.5)	21.4	13.9	17.5	21.4	14.3	12.0
Temporary lodging (15.2)	0.0	13.5	21.5	7.1	17.1	8.0

Table I-42

Problem Areas Selected as One of the Three Most Serious (Q140-Q142)

Problem	Army		Navy		Air Force	
	%	Rank	%	Rank	%	Rank
Local telephone service	27.7	1	30.8	2	18.3	8
Spouse employment	26.1	2	17.5	6	24.5	3
Initial housing costs	24.8	3	26.9	3	49.3	1
Permanent housing	23.6	4	13.5	10	20.3	5
Medical/dental care	23.0	5	13.6	9	32.7	2
Language and cultural differences	22.5	6	22.9	4	23.1	4
Working conditions	16.4	7	18.0	5	19.2	7
Transportation	15.5	8	17.4	7	10.7	11
Temporary lodging facilities	15.2	9	6.8	17	13.8	9
Vehicles	13.6	10	7.6	14	11.0	10
Shipping and storing household goods	13.0	11	5.0	18	7.0	15
Living expenses	12.3	12	12.0	12	19.7	6
Family adjustment to new situation	11.3	13	12.2	11	9.6	12
Security	11.1	14	40.3	1	8.7	14
Recreation and entertainment	9.3	15	9.6	13	9.0	13
Shopping	7.7	16	4.7	20	3.4	19.5
Utility service (other than costs)	7.1	17	16.9	8	5.1	16
Child care	5.5	18.5	7.5	15	3.4	19.5
Schools	5.5	18.5	7.1	16	3.9	18
Separation and related problems	3.6	20	3.1	21	3.1	21
Other	3.4	21	4.9	19	4.2	17

Areas that were not serious problems in all three Services included utility service, shopping, child care, recreation and entertainment, schools, and separation. The responses shown above are for accompanied personnel only.

#### Army

Table I-43 presents the percent of each pay grade group that reported problems that were selected by at least 14 percent of all the Army respondents. The percentage in parentheses after each problem is the percentage of the total sample that selected it. As the sample sizes for junior enlisted respondents and warrant officers are very small, conclusions regarding differences among pay grade groups should be made with caution.

Table I-41  
Opinions of Loaner Furniture (Q101-Q103)

Opinion	Responses (%)			
	Army	Navy	Air Force	Total
Adequacy of the quantity of loaner furniture	(n = 435)	(n = 163)	(n = 215)	(n = 813)
Less than needed	34.9	29.4	50.2	37.9
Adequate	56.6	64.4	49.4	56.2
More than needed	8.5	6.1	0.5	5.9
Satisfaction with the condition of loaner furniture	(n = 440)	(n = 150)	(n = 207)	(n = 797)
Dissatisfied	45.2	24.0	49.8	42.4
Neither dissatisfied nor satisfied	18.2	26.7	21.2	20.6
Satisfied	36.6	49.3	29.0	37.0
Appropriateness of the size of loaner furniture	(n = 436)	(n = 148)	(n = 204)	(n = 788)
Too small	25.9	34.5	35.3	29.9
Right size	67.7	64.2	60.8	65.2
Too large	6.4	1.3	3.9	4.8

## PROBLEMS

### Reporting of Problem Areas

Respondents were asked to indicate the three most serious problems (in rank order of seriousness) encountered by them and their dependents at their present foreign location, from a list of 21 provided. Table I-42 presents by Service the percentage choosing the problems as their first, second, or third most serious. One would expect about 14 percent (3 choices in 21) for each problem if choices were made randomly. Thus, percentages of about 18 or more, or 10 or less are statistically meaningful in terms of expectations based on random choice. Higher and lower percentages indicate definite trends toward choice or nonchoice of a problem by the samples.

Table I-42 shows differences as well as similarities among the services. Initial housing costs were a problem for a relatively high percentage of respondents in the three Services, as were local telephone service, spouse employment, and language and cultural differences. The number one problem for Air Force personnel was initial housing costs, which almost half of the respondents selected as one of the three most serious problems. Two problems chosen by a large percentage of both Army and Air Force personnel (but not Navy personnel) were permanent housing and medical/dental care. Personal security was the overwhelming choice by the Navy sample with 40.3 percent selecting it. Security was not a major concern for the other two Services.

For all facilities, respondents used government facilities much more than economy facilities. There was almost exclusive use (90% or more) of government medical/dental, school, and library facilities. With the single exception of Navy use of economy child care facilities, none of the economy facilities was used exclusively by more than 20 percent of any service group. The Navy respondents tended to be heavier users of economy facilities than were Army and Air Force people. The use of government facilities is underestimated if one looks only at the last column of the table since those responding half and half also use these facilities. In summary, service members and their families in Italy rely very heavily on U.S. government facilities.

#### Use of and Satisfaction With Government-furnished and Loaner Furniture

Beyond the single satisfaction item on government furniture in the list of 31 aspects of housing, facilities and services, service members were asked to respond to five items concerning their attitudes toward and experience with government-furnished and loaner furniture.

##### Government-furnished Furniture (Q99, Q100)

Among all the accompanied respondents, the vast majority (91.2% of the Army, 99.5% of the Navy, and 99.7% of the Air Force) were using their own or mostly their own furniture. The percentages using at least some government furniture varied from a high of 51.1 percent for the Army to 6.1 percent and 11.7 percent for the Navy and Air Force respectively. No significant differences were evident by pay grade group.

Almost all respondents preferred to use all their own or mostly their own furniture in all Services (about 91 to 96%), with most of these preferring to use all of their own. No strong differences among pay grades were found across all three Services in this preference.

##### Loaner Furniture

Opinions about loaner furniture were analyzed for those who answered the questions, including individuals who may have used loaner furniture before obtaining their own. Items deal with the quantity, condition and size of loaner furniture. Results are shown in Table I-41.

Significant numbers of service members (29% of Navy to 50% of Air Force respondents) said there was not enough government loaner furniture. Nearly one-half of the Army and Air Force respondents and about one-quarter of the Navy people said they were dissatisfied with the condition of loaner furniture. About two-thirds felt it was the right size.

Table L-40

## Usage of Economy and Government Facilities

Facilities	Responses (%)							
	Army		Navy		Air Force		Total	
	Enlisted	Officer	Enlisted	Officer	Enlisted	Officer	Enlisted	Officer
<b>Q90: Food shopping facilities</b>								
Economy	5.0	6.3	7.8	9.6	5.3	6.7	6.1	8.0
Half and half	32.2	25.2	41.2	29.8	26.0	28.9	33.9	28.0
Government	62.8	68.4	50.9	60.6	68.8	64.4	60.0	64.0
<b>Q91: Nonfood shopping facilities</b>								
Economy	15.7	10.8	15.5	15.4	12.2	11.4	14.7	13.2
Half and half	39.4	40.8	45.4	29.8	35.9	45.5	40.7	35.7
Government	44.9	48.4	39.1	54.8	52.0	43.2	44.6	51.1
<b>Q92: Medical/dental facilities</b>								
Economy	1.8	1.3	1.4	1.0	1.0	0.0	1.4	1.0
Half and half	2.5	0.6	1.8	0.0	4.6	4.7	2.8	0.7
Government	95.7	98.1	96.8	99.0	94.4	95.3	95.8	98.3
<b>Q93: School facilities</b>								
Economy	4.9	7.6	6.6	8.7	3.8	6.5	5.2	8.0
Half and half	2.0	3.8	2.6	2.0	3.8	0.0	2.7	2.6
Government	93.2	88.5	90.8	89.3	92.5	93.5	92.2	89.4
<b>Q94: Recreation (sports) facilities</b>								
Economy	10.0	17.4	8.3	11.1	11.8	15.9	9.8	14.1
Half and half	19.3	25.2	20.7	17.7	19.9	27.3	20.0	21.7
Government	70.7	57.4	71.0	71.2	68.2	56.8	70.2	64.2
<b>Q95: Entertainment (theatre, etc.) facilities</b>								
Economy	12.1	12.7	9.4	13.2	5.4	7.0	9.4	12.4
Half and half	21.2	22.9	22.0	25.0	15.9	37.2	20.1	25.5
Government	66.7	64.3	68.6	61.8	78.6	55.8	70.5	62.1
<b>Q96: Religious facilities</b>								
Economy	14.1	11.9	18.5	17.9	14.6	16.3	15.8	15.3
Half and half	5.4	9.8	12.6	7.5	6.1	4.7	8.2	8.1
Government	80.5	78.3	68.8	74.6	79.4	79.1	76.0	76.6
<b>Q97: Library facilities</b>								
Economy	1.4	0.6	1.5	1.0	1.3	0.0	1.4	0.7
Half and half	2.3	1.2	2.5	1.5	1.0	0.0	2.0	1.2
Government	96.2	98.1	96.1	97.5	97.7	100.0	96.6	98.0
<b>Q98: Child care facilities</b>								
Economy	14.9	17.9	27.0	45.3	10.7	5.9	17.8	28.4
Half and half	4.6	7.1	7.6	10.7	5.6	11.8	5.9	9.1
Government	80.5	75.0	65.4	44.0	83.7	82.4	76.3	62.5

Table I-39

Satisfaction with Aspects Not Applicable to 10 Percent  
or More of the Respondents (Q57-Q87): Air Force

Housing/Facility/Service Aspect	Responses (%)			
	N/A	Dissatisfied	Neutral	Satisfied
Q78: Number/availability of recreation for preteens	24.8	55.8	10.4	9.0
Q79: Convenience of residence to playgrounds	18.2	54.9	14.8	12.1
Q80: Convenience of residence to youth activity centers	19.9	54.6	14.8	10.7
Q65: Availability/quality of government furniture	20.7	53.9	13.0	12.4
Q77: Number/availability of recreation for teens	32.9	48.3	12.0	6.7
Q64: Laundry facility adequacy	21.1	48.1	7.9	22.9
Q63: Number of kitchen appliances furnished	30.0	45.4	5.6	19.0
Q85: Availability of child care services/facilities	25.2	29.4	21.3	24.2
Q62: Operating condition of kitchen appliances	19.3	28.0	14.0	38.7
Q86: Transportation time for children bused to school	32.3	17.9	18.2	31.6

Table I-38

Satisfaction with 23 Aspects of Housing, Facilities,  
and Services (Q57-Q87): Air Force

Housing/Facility/Service Aspect	Responses (%)			
	N/A	Dissatisfied	Neutral	Satisfied
Q69: Heating system adequacy	0.3	76.3	4.8	18.6
Q84: Convenience of residence to major medical facilities	0.8	64.0	12.4	22.8
Q70: Utility costs	6.2	47.6	16.5	29.7
Q72: Maintenance/repair services on residence	2.5	40.2	20.2	37.1
Q67: Water purity	0.9	39.7	16.1	43.3
Q68: Hot water supply	0.0	39.7	12.7	47.6
Q66: Adequacy of electric service	0.8	39.2	18.9	41.1
Q83: Convenience of residence to dispensary/clinic	0.3	38.3	13.8	47.6
Q87: Accessibility of public transportation	7.8	35.9	28.3	28.0
Q59: Living/dining room size	0.6	35.2	7.6	56.6
Q82: Convenience of residence to government facilities	0.9	34.4	14.6	50.1
Q81: Convenience of residence to installation	0.3	30.1	16.9	52.7
Q58: Bedroom size(s)	0.0	28.8	10.4	60.8
Q61: Number of bathrooms	0.0	27.2	8.5	64.3
Q57: Overall size of residence	0.0	27.1	8.2	64.7
Q71: Housing costs	4.2	26.0	15.1	54.7
Q74: Degree of privacy	0.0	24.8	11.0	64.2
Q73: Personal safety/security	0.0	21.5	19.8	58.7
Q60: Number of bedrooms	0.0	19.2	12.1	68.7
Q75: External appearance of residence	0.0	18.6	11.5	69.9
Q76: Neighborhood appearance	0.3	14.6	16.3	68.8

Table I-37

Satisfaction with Aspects of Housing, Facilities, and Services (Q57-Q87) by Housing Type (Q44): Navy

Aspect	Responses (%)			
	Government-leased (n = 132)		Economy (n = 495)	
	Dissat.	Sat.	Dissat.	Sat.
Q57: Overall size of residence	12.9	82.6	19.9	74.4
Q58: Bedroom size(s)	19.1	77.9	22.4	70.8
Q59: Living/dining room size	16.7	80.3	17.3	74.6
Q60: Number of bedrooms	6.1	85.6	15.5	74.8
Q61: Number of bathrooms	4.5	90.9	18.9	75.1
Q62: Operating condition of kitchen appliances <sup>a</sup>	16.7	76.5	39.9	32.7
Q63: Number of kitchen appliances furnished <sup>a</sup>	9.8	7.5	52.5	12.3
Q64: Adequacy of the laundry facilities <sup>a</sup>	65.9	20.5	55.1	16.3
Q65: Availability/quality of government furniture <sup>a</sup>	21.2	17.4	27.1	8.8
Q66: Adequacy of electrical service	59.8	28.0	71.4	19.7
Q67: Purity of the water	38.6	46.2	40.5	43.1
Q68: Hot water supply	37.1	55.3	58.4	30.4
Q69: Adequacy of heating system (including insulation)	55.3	35.6	77.3	15.3
Q70: Cost of utilities <sup>a</sup>	5.3	19.8	61.0	17.5
Q71: Cost of housing <sup>a</sup>	15.9	22.7	32.9	47.4
Q72: Maintenance/repair services on residence	39.4	40.2	55.0	25.8
Q73: Personal safety/security	50.8	44.7	50.5	38.6
Q74: Degree of privacy	43.2	45.5	24.3	63.0
Q75: External appearance of the residence	40.2	44.7	21.7	63.6
Q76: Appearance of the neighborhood	53.0	34.1	34.2	48.9
Q77: Number/availability of recreational facilities for teenage children <sup>a</sup>	63.6	8.3	46.6	6.8
Q78: Number/availability of recreational facilities for preteen children <sup>a</sup>	65.9	9.1	53.2	9.8
Q79: Convenience of residence to playgrounds <sup>a</sup>	66.7	15.9	60.0	8.2
Q80: Convenience of residence to youth activity centers <sup>a</sup>	73.5	6.1	58.8	6.8
Q81: Convenience of the residence to the installation	84.8	9.8	41.9	40.2
Q82: Convenience of residence to government facilities	80.3	13.6	50.3	31.8
Q83: Convenience of residence to medical dispensary/clinic	33.3	56.1	39.6	40.8
Q84: Convenience of residence to major medical facilities	84.1	9.1	67.8	18.3
Q85: Availability of child care services and facilities <sup>a</sup>	46.2	14.4	35.9	16.7
Q86: Transportation time for children bused to school <sup>a</sup>	25.8	14.4	30.9	20.9
Q87: Accessibility of public transportation	50.5	18.2	39.4	31.3

<sup>a</sup>Not applicable to 10 percent or more of the respondents.



Table I-48

## Improvements Needed by Pay Grade Group: Army

Improvement (% Overall)	Responses (%)					
	E-1 to E-3 (n = 13)	E-4 to E-6 (n = 212)	E-7 to E-9 (n = 211)	W-2 to W-4 (n = 29)	O-1 to O-3 (n = 40)	O-4 to O-6 (n = 84)
Family housing (58.4)	92.3	51.9	58.3	62.1	55.0	70.2
Medical facilities (48.2)	23.1	50.0	45.5	58.6	42.5	53.6
Commissaries (34.0)	49.2	41.6	32.4	28.9	36.7	20.0
Parking facilities (33.1)	23.1	35.4	37.0	27.6	35.0	20.2
Temporary lodgings (28.9)	7.7	25.0	33.6	20.7	32.5	31.0
Barracks (28.9)	30.8	22.6	34.6	20.7	27.5	33.3

Table I-49  
Improvements Needed by Pay Grade Group: Navy

Improvement (% Overall)	Responses (%)					
	E-1 to E-3 (n = 22)	E-4 to E-6 (n = 226)	E-7 to E-9 (n = 176)	W-2 to W-4 (n = 15)	O-1 to O-3 (n = 59)	O-4 to O-6 (n = 122)
Parking facilities (50.5)	27.3	52.7	48.3	53.3	57.6	50.0
Family housing (44.4)	31.8	42.9	44.3	60.0	45.8	46.7
Medical facilities (43.5)	40.9	41.6	40.9	26.7	47.5	51.6
Commissaries (43.4)	63.5	43.8	40.9	40.0	47.5	41.0
Exchanges (33.4)	68.2	38.1	30.7	40.0	30.5	23.0
Temporary lodgings (31.8)	22.7	27.9	28.4	40.0	44.1	38.5
Family entertainment (31.0)	40.9	33.6	35.2	26.7	18.6	24.6
Youth facilities (30.0)	9.1	24.8	40.9	33.3	30.5	27.0

Air Force Response Differences by Pay Grade Group, Housing Type, and Household Composition

Table I-50 shows the percent of each pay grade group selecting the improvements chosen by at least 28 percent of all the Air Force respondents.

Table I-50

Improvements Needed by Pay Grade Group: Air Force

Improvement (% Overall)	Responses (%)				
	E-1 to E-3 (n = 39)	E-4 to E-6 (n = 175)	E-7 to E-9 (n = 101)	O-1 to O-3 (n = 21)	O-4 to O-6 (n = 20)
Medical facilities (72.2)	69.2	73.7	72.3	81.0	55.0
Family housing (61.0)	48.7	65.7	59.4	57.1	55.0
Temporary lodging (39.3)	30.8	35.4	39.6	57.1	70.0
Commissaries (32.0)	35.9	33.7	32.7	23.8	15.0
Recreations facilities (30.1)	43.6	26.9	29.7	33.3	30.0
Family entertainment (29.2)	51.3	32.6	20.8	14.3	15.0

In the Air Force sample, all pay grade groups, with the exception of senior commissioned officers, selected medical facilities most frequently as one of their four most needed improvement areas. The senior commissioned officers selected temporary lodging as the most needed area of improvement. The junior enlisted personnel selected recreation and family entertainment facilities more often than other pay grade groups, but this again is based on too small a sample to generalize. Otherwise, little or no differences occurred among pay grade groups in the choices of improvement areas.

The number of Air Force respondents who occupied government-owned housing was very small (approximately 5% of the obtained sample).

The presence or absence of children living in the household was related to choice of a few areas of needed improvement. The two areas dealing directly with children (youth facilities and child care) showed a higher percentage of those with children choosing the items. In the Air Force sample, parking (facilities) was selected more often as an area of needed improvement by those without children. The Air Force personnel with children selected family housing as an area of needed improvement more often than did those without children.

Choice of the "Most Important" Improvement Needed

Table I-51 shows the improvements selected most often as the "most important" by Service. If the choice of the most important improvement was made randomly or if there was no differentiation among the 14 areas listed, the average percentage of choice for each area would be approximately 7 percent. Therefore, only percentages greater than 7 percent are reported.

Table I-51

**"Most Important" Improvement by Service (Q123)**

Improvement	Responses (%)		
	Army	Navy	Air Force
Family housing	25.1	19.5	30.4
Medical facilities	22.3	17.8	33.9
Troop barracks	10.1	--	--
Commissaries	7.7	9.6	--
Parking facilities	--	9.3	--
Temporary lodging	--	--	7.7
Youth facilities	--	10.4	--

The two most crucial areas for all services in Italy were family housing and medical facilities. These two choices were most frequently selected by the Air Force sample, followed by the Army and Navy samples. The Army personnel selected troop barracks as a needed area of improvement more often than the other services did. Commissaries concerned the Army and Navy personnel somewhat, whereas the Air Force did not choose this improvement area more than would be expected by chance. Although family housing and medical facilities were the most chosen areas of needed improvement for the Navy, parking facilities and youth facilities also represented important areas of needed improvement. Lastly, improvement in temporary lodging was fairly important to Air Force personnel.

Respondents in Italy very definitely gave priority to family housing and medical facilities over other facilities that are part of the living and working environment.

**POLICY PROPOSALS**

Service members were asked to respond to 10 proposals that would affect housing policies. The first six dealt with assignment to government housing. The remaining four dealt with allowances based on choices made by residents of government housing. Respondents rated each of the proposals on a 5-point scale from strongly oppose to strongly favor.

**Policy Proposals Affecting Government Housing Assignment**

Table I-52 shows the percentages of respondents in favor, undecided, and opposed to each of the assignment proposals by enlisted/officer. The ranks indicate the order of their popularity in terms of the percentage favoring the proposals with the enlisted and officer responses combined.

Table I-52  
Responses to Policy Proposals Affecting Assignment  
to Government Housing (Q127-Q132)

Proposal	Rank	Responses (%)					
		In Favor		Undecided		Opposed	
		Enl.	Off.	Enl.	Off.	Enl.	Off.
<b>Army</b>							
Q127: Extend eligibility for assignment to government family housing to all service members with dependents regardless of pay grade.	2	63.6	54.8	8.4	14.6	28.0	30.6
Q128: Assign government family housing solely on the basis of bedroom requirements, but retain designated officer and enlisted housing.	1	59.3	70.4	12.7	3.8	28.0	25.8
Q129: Construct family housing for personnel (with dependents) in pay grades E-1 to E-3 and E-4 (2 years or less service).	3	57.5	51.9	10.7	10.9	31.8	37.2
Q130: Construct family housing for personnel (with dependents) in pay grades E-1 to E-3 and E-4 (2 years or less service) even if it delays construction of all other government family housing.	5	27.5	29.5	12.9	12.8	59.5	57.7
Q131: Extend eligibility for government family housing to personnel (with dependents) in pay grades E-1 to E-3 and E-4 (2 years or less service) even if time on the waiting list increases for everyone else.	4	38.1	31.4	10.3	15.1	51.6	53.5
Q132: Make no changes to the existing assignment procedures for government family housing.	6	24.2	31.5	17.9	21.9	57.8	46.6
<b>Navy</b>							
Q127: Extend eligibility for assignment to government family housing to all service members with dependents regardless of pay grade.	1	75.0	64.8	9.4	9.2	15.6	26.0
Q128: Assign government family housing solely on the basis of bedroom requirements, but retain designated officer and enlisted housing.	3	52.5	67.6	14.7	9.0	32.8	23.4
Q129: Construct family housing for personnel (with dependents) in pay grades E-1 to E-3 and E-4 (2 years or less service).	2	62.4	56.4	11.2	13.3	26.3	30.3
Q130: Construct family housing for personnel (with dependents) in pay grades E-1 to E-3 and E-4 (2 years or less service) even if it delays construction of all other government family housing.	5	39.7	28.3	13.1	11.1	47.2	60.6
Q131: Extend eligibility for government family housing to personnel (with dependents) in pay grades E-1 to E-3 and E-4 (2 years or less service) even if time on the waiting list increases for everyone else.	4	53.7	40.6	11.3	13.2	35.0	46.2
Q132: Make no changes to the existing assignment procedures for government family housing.	6	18.0	21.5	19.0	19.8	63.0	58.7
<b>Air Force</b>							
Q127: Extend eligibility for assignment to government family housing to all service members with dependents regardless of pay grade.	1	75.4	62.5	7.9	7.5	16.7	30.0
Q128: Assign government family housing solely on the basis of bedroom requirements, but retain designated officer and enlisted housing.	3	49.7	64.4	19.3	11.1	31.1	24.4
Q129: Construct family housing for personnel (with dependents) in pay grades E-1 to E-3 and E-4 (2 years or less service).	2	64.8	50.0	12.6	20.5	22.6	29.5
Q130: Construct family housing for personnel (with dependents) in pay grades E-1 to E-3 and E-4 (2 years or less service) even if it delays construction of all other government family housing.	5	37.7	29.5	19.2	18.2	43.2	52.3
Q131: Extend eligibility for government family housing to personnel (with dependents) in pay grades E-1 to E-3 and E-4 (2 years or less service) even if time on the waiting list increases for everyone else.	4	45.5	48.9	17.2	11.1	37.3	40.0
Q132: Make no changes to the existing assignment procedures for government family housing.	6	18.0	21.5	19.0	19.8	63.0	58.7

The majority of respondents in the three Services were in favor of extending eligibility to and constructing family housing for those currently not eligible (E-1 to E-3s and E-4s with less than 2 years of service). Assignment of government family housing based solely on bedroom requirements while maintaining separate officer and enlisted housing also received majority approval in all three Services.

When the eligibility extension and construction proposals for E-1 to E-3s and E-4s with less than 2 years of service groups were presented with negative consequences for others (construction delays and increases in waiting time), the percent in favor declined dramatically across all three Services. No change in assignment procedures was the least popular of the six proposals.

Of interest is the strength of the opinions. For proposals where the majority were in favor, a higher percentage rated the item strongly favor than somewhat favor across the three Services. The same was generally true for the proposals that the majority opposed: a higher percentage rated the proposals strongly oppose than somewhat oppose.

In the discussion of each proposal that follows, group mean responses are considered negative if they fall below 3.0 and positive if they are above 3.0. Household composition means with or without children.

Proposal 1 (Q127): Extend Eligibility for Assignment to Government Family Housing to All Service Members With Dependents, Regardless of Pay Grade.

Army

The unconditional extension of eligibility for family housing to all service members with dependents was the most popular of the six assignment proposals among the enlisted respondents (63.6% in favor) and second among the officers (54.8% in favor). By individual pay grade groups, the only significant difference found was that the E-4 to E-6 group favored the proposal more than the E-7 to E-9s. Overall, the mean responses for all pay grade groups were positive (3.1 to 3.8), except for the W-1 to W-4 respondents (2.8). By household composition, residents of government-leased housing favored the proposal more than those living in government-owned housing. No difference was found between those with or without children in their household.

Navy

This proposal was the most popular of the six affecting assignment policy among the enlisted respondents (75.0% in favor) and second in popularity among officers (64.8% in favor). Significant pay grade group differences were not found; all group means were positive (3.2 to 4.4). No differences were found by current housing type or household composition.

Air Force

Enlisted respondents ranked this proposal first in popularity (75.4% in favor) while it was second among officers (62.5% in favor). Pay grade group differences were not found; all groups means were positive (3.2 to 4.3) except for the O-4 to O-6 group (3.0). No differences were found by current housing type or household composition.

**Proposal 2 (Q128): Assign Government Family Housing Solely on the Basic of Bedroom Requirements, but Retain Designated Officer and Enlisted Housing.**

**Army**

This proposal was the second most popular of the six assignment proposals among enlisted respondents (59.3% in favor) and first among the officers (70.4% in favor). No differences were found by pay grade group or current type of housing. The average responses for all pay grade groups were positive (3.3 to 4.1). Respondents with children in their household were significantly more in favor than those without children.

**Navy**

Enlisted respondents ranked this proposal fourth out of the six (52.5% in favor). For officers, it was the most popular (67.6% in favor). The enlisted pay grade group means fell between 2.9 and 3.0, compared to the officers (3.1 to 3.8). These differences were not statistically significant. No differences were found by current housing type or household composition.

**Air Force**

This proposal was third in popularity among the enlisted (49.7% in favor) and the most popular of the six assignment policies among officers (64.4% in favor). Pay grade group differences were not found; all group means were positive (3.1 to 3.8) except for the E-1 to E-3s (2.9). No differences were found by current housing type or household composition.

**Proposal 3 (Q129): Construct Family Housing for Personnel (With Dependents) in Pay Grades E-1 to E-3 and E-4 (2 Years or Less Service).**

**Army**

This proposal was third in popularity of the six assignment proposals among both the enlisted respondents (57.7% in favor) and the officers (51.9% in favor). No differences were found by pay grade group. The mean responses for the E-1 to E-6 and O-1 to O-6 pay grade groups were on the positive side of the 5-point scale (3.2 to 4.1) compared to the mean responses of the E-7 to E-9 and W-1 to W-4 respondents (2.5 to 2.9). Residents of government-leased housing were more in favor than those living in government-owned housing. No differences were found by household composition (i.e., with or without children).

**Navy**

This proposal ranked second among the enlisted (62.4% in favor) and third among the officers (56.4% in favor). Significant pay grade group differences were not found; all group means were positive (3.1 to 3.9). No differences were found by current housing type or household composition.

**Air Force**

This was the second most popular proposal among the enlisted respondents (64.8% in favor) and third among the officers (50.0% in favor). Pay grade group differences were not found; all group means were positive (3.2 to 4.1) except for the O-4 to O-6 group (3.0). No differences were found by current housing type or household composition.

Proposal 4 (Q130): Construct Family Housing for Personnel (With Dependents) in Pay Grades E-1 to E-3 and E-4 (2 Years or Less Service) Even if it Delays Construction of All Other Government Family Housing.

Army

This proposal ranked fifth out of the six assignment proposals among the enlisted respondents (27.5% in favor, 59.5% opposed). For the officers, it was least favored of the six proposals (29.5% in favor, 57.7% opposed). The E-1 to E-3 and O-1 to O-3 groups were significantly more in favor than the W-1 to W-4 respondents. However, only the E-1 to E-3 group mean response was positive (3.2), compared to all other pay grade groups (1.4 to 2.8). No differences were found as a function of current housing type or household composition.

Navy

Ranked fifth (out of six) by both enlisted and officer respondents, this proposal produced mixed responses. The enlisted were 39.7 percent in favor and 42.2 percent opposed. Officers were 28.3 percent in favor and 60.6 percent opposed. E-1 to E-3 respondents were significantly more in favor than all other pay grade groups. The E-1 to E-3 group mean was the only one on the positive side of the response scale (3.4) compared to 2.2 to 2.6 for all other groups. No significant differences were found by current housing type or household composition.

Air Force

This proposal ranked fifth in popularity, with more respondents opposed to it than in favor (enlisted: 37.7% in favor, 43.2% opposed; officers: 29.5% in favor, 52.3% opposed). By pay grade group, the E-1 to E-3 respondents were significantly more in favor of the proposal than the E-7 to E-9 and O-4 to O-6 groups. Only the E-1 to E-3 group mean was positive (3.6) compared to the others (2.1 to 2.9). No differences were found by current housing type or household composition.

Proposal 5 (Q131): Extend Eligibility for Government Family Housing to Personnel (With Dependents) in Pay Grades E-1 to E-3 and E-4 (2 Years or Less Service) Even if Time on the Waiting List Increases for Everyone Else.

Army

This proposal ranked fourth among the six assignment proposals among the enlisted respondents and fifth among the officers. More respondents were opposed than in favor (enlisted: 38.1% in favor, 51.6% opposed; officers: 31.4% in favor, 53.5% opposed). No pay grade group differences were found. Only the E-1 to E-3 respondents' mean was on the positive side of the 5-point scale (3.1) compared to all other groups (1.7 to 2.7). Residents of government-leased housing favored the proposal more than those in government-owned housing. No differences were found by household composition.

Navy

Similar to proposal 4, this one drew mixed responses. It was third in popularity among enlisted respondents (53.7% in favor, 35.0% opposed) and fourth among officers (40.6% in favor, 46.2% opposed). No significant pay grade group differences were found;



however, the E-1 to E-3 and E-4 to E-6 group means were positive (3.5 and 3.1 respectively) compared to all other groups (2.5 to 2.9). No differences were found by current housing type or household composition.

#### Air Force

This was the fourth most popular of the six assignment proposals, drawing mixed responses (enlisted: 45.5% in favor, 37.3% opposed; officers: 48.9% in favor, 40.0% opposed). Pay grade group differences were not found; only the E-1 to E-3 and O-1 to O-3 group means were positive (3.4 and 3.1 respectively) compared to all other groups (2.6 to 3.0). No differences were found by current housing type or household composition.

#### Proposal 6 (Q132): Make No Change to the Existing Assignment Procedures for Government Family Housing.

#### Army

This was the least favored of the six assignment proposals among the enlisted (24.2% in favor, 57.8% opposed) and fourth among the officers (31.5% in favor, 46.6% opposed). No differences were found by pay grade group; all mean responses were on the negative side of the 5-point scale (1.8 to 2.7). Residents of government-owned housing were more in favor than those living in economy housing. No differences were found by household composition (i.e., with or without children).

#### Navy

This proposal was the least popular of the six assignment proposals. The enlisted respondents were 18.0 percent in favor and 63.0 percent opposed. The officers were 21.5 percent in favor and 58.7 percent opposed. Pay grade group differences were not found; all group means were negative (1.2 to 2.1). No differences were found by current housing type; however, respondents with children were more in favor than those without children.

#### Air Force

This was the least popular of the six assignment proposals (enlisted: 19.8% in favor, 63.3% opposed; officers: 17.1% in favor, 58.5% opposed). The only significant pay grade group difference was that the E-7 to E-9 group was more in favor than the E-1 to E-3 group. All group means were negative (1.3 to 2.2). No differences were found by current housing type or household composition.

#### Policy Proposals Affecting Allowances for Government Housing

The four proposals to be discussed dealt with giving a utility usage allowance and an allowance for maintenance/repair done by the service member, getting more bedrooms in exchange for making a payment in addition to BAQ, and choosing to have fewer bedrooms in order to retain part of the BAQ. Table I-53 presents the distribution of responses of these four proposals by enlisted/officer. The popularity rankings are based on the total percentage in favor with enlisted and officer responses combined.

Table I-53

Responses to Policy Proposals Affecting Allowances  
for Government Housing (Q133-Q136)

Proposal	Rank	Responses (%)					
		In Favor		Undecided		Opposed	
		Enl.	Off.	Enl.	Off.	Enl.	Off.
<b>Army</b>							
Q133: Provide an annual utility allowance (based on family size, housing size and location) allowing retention of any amount not spent on utilities and requiring out-of-pocket payment for any amount over the allowance.	3	59.4	57.2	7.7	13.2	32.9	29.6
Q134: Provide a reasonable allowance to occupants for doing selected minor repairs and maintenance on their units, over and above what would normally be expected of them.	1	61.1	70.1	7.0	12.1	31.8	17.8
Q135: Allow service personnel to get housing with more bedrooms than they are qualified to have if they pay an additional amount of not more than 25 percent of their BAQ.	4	34.9	29.0	10.6	14.8	54.5	56.1
Q136: Allow service members to retain not more than 25 percent of their BAQ if they live in housing units with fewer bedrooms than they are qualified to have.	2	64.7	57.1	10.0	12.8	25.2	30.1
<b>Navy</b>							
Q133: Provide an annual utility allowance (based on family size, housing size and location) allowing retention of any amount not spent on utilities and requiring out-of-pocket payment for any amount over the allowance.	3	59.5	60.3	14.5	9.8	26.0	29.9
Q134: Provide a reasonable allowance to occupants for doing selected minor repairs and maintenance on their units, over and above what would normally be expected of them.	1	79.1	69.7	9.5	12.9	11.4	17.4
Q135: Allow service personnel to get housing with more bedrooms than they are qualified to have if they pay an additional amount of not more than 25 percent of their BAQ.	4	33.9	40.3	18.2	13.8	47.9	45.9
Q136: Allow service members to retain not more than 25 percent of their BAQ if they live in housing units with fewer bedrooms than they are qualified to have.	2	60.6	59.2	18.1	13.8	21.4	27.0
<b>Air Force</b>							
Q133: Provide an annual utility allowance (based on family size, housing size and location) allowing retention of any amount not spent on utilities and requiring out-of-pocket payment for any amount over the allowance.	2	59.9	57.8	17.2	15.6	22.9	26.7
Q134: Provide a reasonable allowance to occupants for doing selected minor repairs and maintenance on their units, over and above what would normally be expected of them.	1	70.2	61.9	14.6	16.7	15.2	21.4
Q135: Allow service personnel to get housing with more bedrooms than they are qualified to have if they pay an additional amount of not more than 25 percent of their BAQ.	4	26.7	22.7	16.6	18.2	56.7	59.1
Q136: Allow service members to retain not more than 25 percent of their BAQ if they live in housing units with fewer bedrooms than they are qualified to have.	3	56.8	54.8	21.3	9.5	21.9	35.7

The most favored proposal in all Services and, especially for the Navy personnel, concerned receiving an allowance for doing minor maintenance/repair work. For the Army and Navy samples, the second most favored proposal was the option to retain some of their BAQ if they lived in housing units with fewer bedrooms. The second most favored proposal for the Air Force sample was providing utility allowances. The proposal receiving the most opposition from all service members involved allowing residents to pay additional money (out-of-pocket) to have more bedrooms than they were qualified to have.

Proposal 7 (Q133): Provide an Annual Utility Allowance (Based on Family Size, Housing Size, and Location) Allowing Retention of Any Amount Not Spent on Utilities and Requiring Out-of-pocket Payment for Any Amount Over the Allowance.

#### Army

This proposal ranked third in popularity (out of four choice-allowance proposals) among the enlisted respondents (57.2% in favor) and second among the officers (59.4% in favor). Only the E-1 to E-3 and W-1 to W-4 group mean responses fell on the negative side of the response scale (both 2.9) compared to all other pay grade groups (3.2 to 3.3). These differences were not significant. Residents of economy housing were significantly more in favor of the proposal than those living in government-owned or government-leased housing. No differences were found as a function of household composition.

#### Navy

This proposal was ranked third out of the four choice-allowance proposals among the enlisted (59.5% in favor) and second among the officers (60.3% in favor). Pay grade group differences were not found; group means were all positive (3.2 to 3.9). Residents of economy housing favored the proposal more than those living in government-leased housing. No differences were found by household composition.

#### Air Force

This was the second of the four choice-allowance proposals (enlisted, 59.9% in favor; officers, 57.8% in favor). No pay grade group differences were found; all group means were positive (3.2 to 3.5). No differences were found by current housing type or household composition.

Proposal 8 (Q134): Provide a Reasonable Allowance to Occupants for Doing Selected Minor Repairs and Maintenance on Their Units, Over and Above What Would Normally be Expected of Them.

#### Army

Both enlisted respondents and officers ranked this proposal first in popularity out of the four choice-allowance proposals (enlisted, 70.1% in favor; officers, 61.1% in favor). No significant pay grade group differences were found; all group mean responses were positive (3.3 to 3.7). No differences were found by current housing type or household composition.

### Navy

Both enlisted respondents and officers ranked this first in popularity (enlisted, 79.1% in favor; officers, 69.7% in favor). Pay grade group differences were not found; all group means were positive (3.4 to 4.4). No differences were found by current housing type or household composition.

### Air Force

This was the most popular of the four choice-allowance proposals (enlisted, 70.2% in favor; officers, 61.9% in favor). No significant pay grade group differences were found; all group means were positive (3.4 to 3.8) except for the O-4 to O-6 group (2.8). No differences were found by current housing type or household composition.

Proposal 9 (Q135): Allow Service Personnel to Get Housing With More Bedrooms Than They are Qualified to Have if They Pay An Additional Amount of Not More Than 25 Percent of Their BAQ.

### Army

Least popular of the four choice-allowance proposals, more respondents opposed it than favored it (enlisted: 34.9% in favor, 54.5% opposed; officers: 29.0% in favor, 56.1% opposed). All pay grade group means were on the negative side of the response scale (1.6 to 2.5). No significant differences were found by pay grade group, current housing type, or household composition.

### Navy

This was the least popular of the four choice-allowance proposals (enlisted: 33.9% in favor, 47.9% opposed; officers: 40.3% in favor, 45.9% opposed). No pay grade group differences were found; all group means were negative (2.4 to 2.9). No differences were found by current housing type or household composition.

### Air Force

This was the least popular of the choice-allowance proposals (enlisted: 26.7% in favor, 56.7% opposed; officers: 22.7% in favor, 59.1% opposed). No pay grade group differences were found; all group means were negative (2.1 to 2.7). No differences were found by current housing type or household composition.

Proposal 10 (Q136): Allow Service Personnel to Retain Not More Than 25 Percent of Their BAQ If They Live in Housing Units With Fewer Bedrooms Than They Are Qualified to Have.

### Army

This was the second most popular of the four choice-allowance proposals among enlisted respondents (64.7% in favor) and third among the officers (57.1% in favor). Significant pay grade group differences were not found; however, E-1 to E-3 and W-1 to W-4 group mean responses were negative (2.7 and 2.6 respectively) compared to all other groups (3.3 to 3.5). Residents of government-leased housing were significantly more in favor of the proposal than those in economy housing. No differences were found by household composition.

### Navy

This was the second most popular of the choice-allowance proposals among enlisted respondents (60.6% in favor) and third among the officers (59.2% in favor). No pay grade group differences were found; all group means were positive (3.1 to 3.5) except the W-1 to W-4 respondents (2.9). No differences were found by current housing type or household composition.

### Air Force

This was the third most popular of the proposals (enlisted, 56.8% in favor; officers, 54.8% in favor). No significant pay grade group differences were found; E-4 to E-9 and O-1 to O-3 group means were positive (3.2 to 3.4) while E-1 to E-3 and O-4 to O-6 means were negative (both 2.8). No differences were found by current housing type or household composition.

## **SPECIAL GROUPS**

As shown on Table I-8, a very small number of respondents in each of the three service samples fell into the special groups designation. Sample sizes vary widely as a function of the items used to define the special groups. Not all respondents answered the items that were used for the definitions of the groups. As a result of this, the number comprising the total sample for each group also varies widely.

### Army

#### Accompanied Female Service Members

Only 3.5 percent of the sample (n = 22) were identified as accompanied female service members. This group was too small for analysis. Only a few of their responses are noted here.

They were most often found in the E-4 to E-6 pay grade group (77.3%). Nearly one-quarter (22.7%) were separated, divorced, or widowed, and 27.2 percent had changed marital status since arriving at the current duty station. They were much more likely to be single parents (45.4%) than males (4.0%).

The accompanied female service members were more likely than their male counterparts to be undecided about making the military a career. They were also less likely than males to report a willingness to choose the present assignment over again. Female service members were more likely than their male counterparts to report spouse employment and local telephone service among their most serious problems. Regarding improvements needed at the current duty station, 18.2 percent selected both family housing and parking facilities, and 13.6 percent selected commissaries. In contrast, accompanied male service members most frequently selected family housing (25.3%) and medical facilities (22.8%).

#### Accompanied Single Parents

Only 2.9 percent of the sample (n = 9) were identified as single parents.

### Comparisons by Spouse Nationalities

In the Army sample, 73.3 percent of the service members were married to U.S. born spouses (n = 451), 11.4 percent to local nationals (n = 70), and 15.3 percent to other foreign nationals (n = 94). Local and other foreign national spouses were most often found among the E-4 to E-9 pay grade groups.

Relative to the current type of housing and housing preferences, respondents with U.S. born or other foreign national spouses showed approximately half living in government housing and half in economy housing. Similarly, approximately half of each of these groups preferred government and economy housing. Among respondents with local national spouses, approximately one-third lived in government housing and two-thirds in economy housing. Only one-quarter preferred government housing, however, and three-quarters preferred economy housing. Respondents with local national spouses were more likely than the other groups to live in communities with few or no other Americans. Reliance on the service member for transportation was highest among other foreign national spouses (40.9%) compared to U.S. born (25.5%) or local national spouses (27.7%). In general, greater usage of economy (versus government) services was found among respondents married to local nationals.

Respondents with local or other foreign national spouses were slightly more career motivated than those with U.S. born spouses. They also were more likely to prefer to extend in the present location or do a second tour in Italy and indicated a greater willingness to choose the present assignment again than the others. Those with U.S. born spouses more often preferred to return to CONUS, and those with other foreign national spouses more often preferred to do a second tour in a different foreign country.

Reporting of the most serious problems encountered varied somewhat as a function of the spouse nationality. Those with U.S. born and other foreign national spouses most often reported permanent housing (12.1 and 15.4% respectively); those with local national spouses most frequently reported medical/dental facilities (14.7%), followed by working conditions (11.8%). Similarly, choices of the areas needing improvement were most frequently family housing and medical facilities for those with U.S. born and other foreign national spouses, while those with local national spouses most often chose medical facilities and troop barracks.

### Respondents Accompanied by Nonsponsored Dependents

Only 12 respondents in the Army sample were identified as having nonsponsored dependents living with them (1.9% of the sample).

### Respondents Preferring to Leave the Service (Excluding Those Who Had Already Served 20 Years or More)

Only 5.7 percent of the sample fell into this special group (n = 30). No differences were evident by pay grade group. They were twice as likely to report having no sponsor (44.4%) than those not preferring to leave (22.5%). Half of the respondents preferring to leave had spouses who were unemployed and NOT looking for work, compared to 36.4 percent of those not preferring to leave.

Respondents preferring to leave were much more likely than the others to be dissatisfied with the overall comfort and adequacy of their residences (55.1 versus 31.9%).

"The inability to make direct contact with family members due to no telephones causes needless worry, many rumors, and on occasion, near panic within the community." (Army, E-8)

Lack of adequate medical and dental facilities for Army and Navy personnel was also a frequently reported problem. One has the choice of going to the government hospitals in Naples or Vincenzo or one can go to the Italian-run hospitals for treatment. The Italian hospitals were reported to be outdated, unsanitary, and inadequate, making personnel fear treatment in such places. Because a great many people are located quite a distance from Naples, many people have to rely on these Italian hospitals. Another problem associated with the medical treatment in Italy is that a lot of people are transported to Germany for minor problems. This causes a significant disruption in the home life of the person treated; often there is no one to take care of dependents if one parent is in Germany and the other is deployed on ship. A Navy commander expressed his discontent with the following comment:

Medical support is dangerously lacking. The clinic is good for colds, skinned knees, and routine dental work. It cannot handle life-threatening emergencies or acute and specialized medicine. Italian emergency medicine is both inadequate and demonstrably poor. (Navy O-5)

Another serious problem encountered by service members in Italy that was not an item to choose from in the questionnaire but was discovered through the write-in comments was that of earthquakes. This common disaster appears to cause constant fear and stress because of the uncertainty of the safety in the area. In the Naples area, a hospital and a school are built on active seismic fault areas. As mentioned previously, the lack of a communication system (telephones), coupled with the common earthquakes, can cause panic in affected communities. A Navy enlistee expressed his fears of this natural disaster:

We live in constant fear of serious earthquakes. We leave Naples in three weeks. People do not realize how scared many people are over here. We have tremors everyday! Something needs to be done! (Navy E-4)

The last serious problem in Italy to be discussed is the personal security problem. This appears to be of greatest concern to Navy personnel that over 40 percent of the respondents selected as one of the most serious problems. As mentioned previously, Navy personnel are concentrated in Naples, which is known for security problems and a high crime rate. In fact, crime was found to be more of a problem in Italy than in any other country surveyed. Personnel in all three Services had experienced, or felt the potential of, vandalism, burglary, armed robbery, or terrorism. Many personnel had been crime victims more than once. Residential housing areas such as the tower-style apartments in Naples are seen as good targets for crime because they are concentrated sources of valuables and money. During the summer, Naples attracts a large population of vacationers with an increase in the crime rate. The difficulty in obtaining telephones prevents personnel from reporting criminal acts or calling for help. The problem of security was expressed succinctly by an Army enlistee:

Something should be done to provide more security to government quarters and in some parco's where many Americans live, as most people are broken in during a three year tour at least once and some families two or three times. A great deal of money is paid out in

Substantial proportions of respondents in all three Services were also dissatisfied with the maintenance and repair services on the residences. Two areas of inadequacies perceived as serious by the Army and Navy samples included the hot water supply and the water purity. Navy personnel were also dissatisfied with the electrical service, convenience to the installation, personal safety/security, and public transportation. Housing aspects dealing with the size of the residence were the only areas where Navy personnel reported more satisfaction than dissatisfaction. Although the Air Force personnel did not appear to be dissatisfied with utility services, they were much more dissatisfied than the other two groups with utility costs. In summary, the heating systems and the convenience of the residence to medical facilities were by far the most serious areas of perceived inadequacies, and the Navy sample was by far the most dissatisfied group in regards to housing services and facilities in general.

Service members and their families in Italy rely very heavily on U.S. government facilities and services. There was almost exclusive use (90% or more in all three Services) of government medical/dental facilities, schools, and libraries. No type of economy facilities or services was used by a substantial portion of respondents.

The survey results pointed out many serious problems for military personnel living in Italy. There were both similarities and differences among the three Services. All Services reported a serious problem with initial housing costs. This problem was especially severe for the Air Force, as indicated by an individual in the Air Force:

The cost of initial set-up and utilities far exceeds government allowances; I have depleted my entire savings to make this overseas PCS. (Air Force E-8)

Another reason for the high initial housing costs may be the lack of facilities in lodgings. A Navy officer made this comment on the issue:

In Italy you must supply your own stove, refrigerator, and kitchen cupboards, sometimes even your own sink. It would have been a much better tour if government quarters had been available. (Navy O-1)

Other problems found across all three Services were language and cultural differences and permanent housing. The facilities in the permanent residences are not up to American standards. Heating, water, and kitchen facilities were poor. Water is scarce in the summer and must be bought in bottles. There is inadequate insulation causing service members to use kerosene heaters that are both expensive and dangerous. These problems are expressed by an enlisted Army person:

While the present residence provides an adequate home-life, the facilities themselves are lacking in a residence of American persuasion. There is a definite need for insulation throughout the structure which reduces the adequacy of the heating system. Kitchen storage cabinets and closets are non-existent. The tap water is non-potable and drinking water has to be brought in from a commercial source. (Army E-7)

Another serious problem across all three Services, especially for the Army and Navy personnel, are local telephones, which are few and inadequate. There are no communication systems between military personnel and their duty stations. Lack of telephones can cause many worries and concerns as mentioned by one of the respondents when he said,



The type of housing one occupied was related to overall satisfaction, but differed among the three Services. For Army personnel, those in government-leased housing were much more dissatisfied (45.6%) than those in government-owned or economy quarters. Navy personnel were less satisfied if they lived in government-owned property, and Air Force personnel were dissatisfied with both government-owned and government-leased properties. Across all three Services, those living in economy quarters were the most satisfied group and those living in government-leased were the most dissatisfied group.

In general, those service members with children in the household tended to be less satisfied with the overall comfort and adequacy of their permanent housing. This is due in large part to a perceived lack of adequate recreational facilities for children. Respondents with children reported dissatisfaction with not only the number of adequate playgrounds/recreational facilities, but also with the convenience of the residence to these facilities.

Variables that contributed the most to predicting overall satisfaction with one's residence differed for the three Services. In the Army sample, satisfaction with the degree of privacy of the residence was the most important factor contributing to overall satisfaction. The adequacy of the electrical service and bedroom sizes were also factors contributing to overall satisfaction. For Navy personnel, satisfaction with the external appearance of the residence was the most important factor contributing to overall satisfaction. The size of the residence and the costs of utilities were also important variables in the prediction of Navy members' overall satisfaction. In the Air Force sample, the size of the residence was the best predictor of whether personnel were satisfied with their housing. Personal safety and security, along with convenience to the medical dispensary, were also important contributors to an Air Force member's overall satisfaction. These differences found among the three Services may not be a reflection of the differences in Services, but rather may have been due to the areas where the majority of personnel in each Service were located.

The basic dimensions involved in the concept of overall housing satisfaction were determined through a factor analysis. Results showed that overall satisfaction was multidimensional and, in all three Services, was comprised of five dimensions. These five dimensions were satisfaction with structural aspects of the residence, operating systems, location, recreation facilities for children, and the immediate physical-psychological surroundings of the residence (e.g., security, privacy, appearances). Overall satisfaction was most closely associated with satisfaction with structural aspects and satisfaction with immediate physical-psychological surroundings.

Satisfaction with specific aspects of the Italian housing facilities and services showed similarities as well as differences among the three Services. The two most frequently reported areas of dissatisfaction in all three Services were the inadequate heating systems and the inconvenience of the residence to major medical facilities. In fact, three-quarters of the Navy and Air Force personnel and two-thirds of the Army personnel were dissatisfied with these two aspects of housing facilities. The problems associated the inadequate heating systems were expressed by an Air Force enlistee:

Heating is the major problem. To adequately heat my house, I employ three portable kerosene heaters, 24 hours a day, throughout the winter. It is both expensive and dangerous. The heating system in the house is totally inadequate. (Air Force E-5)

Commuting distances from the residence to the installation differed significantly for the three Services. While the Air Force and Army personnel usually commuted 5 miles or less, the Navy personnel usually had to commute over 15 miles. Although 15 miles does not seem far to travel for someone who lives in CONUS, this typically averages out to over a 2-hour drive for Navy personnel stationed in Naples. Other commuting problems were evidenced by write-in comments from the respondents. An individual in the Army wrote:

My present assignment is the NATO Communications School. There is NO housing office. The nearest medical/dental clinic (U.S.) is 50 miles. The nearest hospital (U.S.) is 100 miles away. The nearest DoD school is 100 miles away. There are limited exchange facilities 50 miles away, with full facilities 100 miles away. There is only privately rented housing available. This makes having a family here rather difficult. (Army E-7)

Most respondents occupied temporary economy housing upon arrival in Italy. Over 90 percent of all service members stayed in temporary lodging for less than 3 months. The majority of respondents spent less than 1 month in temporary facilities. For the most part, respondents were dissatisfied with most of the features in their temporary lodgings. The exception to this was Army personnel who were in government lodgings. The main factor contributing to the dissatisfaction with temporary lodgings for both the Army and Navy personnel was the size of the quarters. For the Air Force personnel, privacy was the major factor contributing to their dissatisfaction, followed by the size of the quarters. Features most frequently reported as unavailable in temporary lodgings were kitchen and laundry facilities in addition to play space for children. Overall, about one-quarter of the respondents reported that the temporary lodging facilities had worsened their attitude toward living overseas.

About 60 percent of Army and Navy personnel found the housing offices helpful in finding economy housing, whereas in the Air Force, only 40 percent agreed with this statement. However, respondents across all three Services were quite dissatisfied with the number of listings available and the lack of up-to-date information available on those listings. They were also dissatisfied with the waiting period for government housing and the assignment and referral services. Over 10 percent of both Army and Air Force respondents reported that housing office services were not provided. Many respondents commented on their dissatisfaction with the employees who run the housing offices. An officer in the Navy expressed his attitude toward the housing services with the following comments:

The most serious problem is on-base corruption resulting from local nationals and Americans working within the military system who are allowing rip-offs of the Americans arriving. This is particularly prevalent in the Housing Office which encourages the landlords to charge higher prices and receive kickbacks for renting to Americans. Also in the exchange many items end up going home with the local nationals and never make it to the American community for availability. (Navy O-4)

Respondents were asked several questions regarding their satisfaction with the permanent housing in Italy. Although approximately 55 percent of the respondents reported overall satisfaction with their permanent residences, almost a third of the respondents reported that they were dissatisfied. Air Force personnel were slightly more satisfied with their residences than were Army or Navy personnel, and spouses tended to be less satisfied than the service member.

## DISCUSSION

Except where noted otherwise, the discussion will focus on accompanied service members in the Army, Navy, and Air Force stationed in Italy.

The samples for each Service consisted primarily of individuals in the E-4 to E-6 and E-7 to E-9 pay grade groups. The junior enlisted grades (E-1 to E-3) were underrepresented in all Services, as were the E-4 to E-6 and O-1 to O-3 groups in the Air Force. It should be noted that results from this survey may be biased because the sample sizes for particular groups of respondents are not representative of the population.

The typical respondent was a married male accompanied by his wife and two children. The respondents were highly career motivated, with a very large majority in each Service reporting intentions of remaining in the Service for 20 years. A large majority of the respondents had prior experience in foreign countries. However, the majority of the respondents wished to return to CONUS after their present assignment, with only approximately 5 percent preferring to stay in Italy.

Over two-thirds of the spouses in all three Services were currently unemployed, partly due to difficulties in finding work in a foreign country. This was a serious problem expressed especially by enlisted personnel in the Army and Air Force. Given the unemployed status of the majority of the spouses, the average family income usually mirrored that of the service member's pay grade. The hardships caused by this situation were expressed by an individual in the Air Force:

Because of conditions at present duty locations, my wife and child returned to the States. My wife could not find employment on-base and could not finish her degree because the classes were not offered. I know that jobs are hard to come by but I wish there were more to go around for dependents. (Air Force E-4)

In all three Services, the typical respondent had been in permanent housing for over 17 months. A very large percentage of respondents occupied economy housing. About 50 percent of the Army sample occupied economy housing as compared to three-quarters in the Navy and a whopping 90 percent in the Air Force. Approximately one-fourth of both the Army and Navy samples lived in government-leased properties, with less than 5 percent of the Air Force sample occupying this type of housing. The only Service with substantial numbers occupying government-owned housing was the Army, with one-quarter of its personnel living in this type of housing. These differences were probably a function of the number of government-owned family housing units in the locations where the services had their largest concentrations.

The type of housing most frequently preferred in all Services was economy housing. However, those who had disparities between the type of housing they currently occupied and the type they would prefer to occupy usually were Navy and Air Force personnel who preferred to live in government-owned housing.

Army and Navy respondents typically occupied economy apartments, while Air Force personnel tended to occupy a variety of housing styles such as single family, duplexes, and apartments. The respondents' satisfaction with their residences along with the problems faced and the improvements suggested are summarized later in this discussion.

Presence or absence of children in the household had no strong statistical effects on the perceived effects of living conditions.

#### Air Force

Senior officers (O-4 to O-6) were more positive in their perceived effects of living conditions on their job performance, military career intentions, and willingness to choose their present assignment again than the enlisted groups. The senior officers were the only pay grade group to show an average rating on the positive side of the scale for effects of living conditions on job performance and military career intentions.

Type of housing did not relate to effects of living conditions on job performance or military career intentions. However, despite the small numbers of service members in government-owned and government-leased housing, there was a statistical relationship between housing type and willingness to choose the present assignment again in light of the living conditions. Residents of economy housing had a more positive average rating of willingness to choose their present assignment again than did the government-owned/leased group.

Service members without children living with them were somewhat more positive than those with children in the perceived effects of living conditions on job performance. No relationships were found for the other two living condition effects.

#### Explaining the Perceived Living Condition Effects

Looking for clues to the perception of the effects of living conditions, a group of variables believed to represent factors related to these conditions were selected for inclusion in multiple regression analyses. They included demographic characteristics, time factors, perceived effects and satisfaction with temporary housing, satisfaction with the housing office, characteristics of the residence, spouse and dependent transportation, and overall satisfaction with the current residence.

Aggregated across all three Services, service member overall satisfaction with the adequacy and comfort of the permanent residence showed the highest relationship (among the group of selected variables above) to perceived effects of living conditions on job performance. The higher the satisfaction, the more likely was the perception of positive effects on the job.

Overall satisfaction with the residence and the effects of the temporary lodging experience on attitude toward living in a foreign location had the highest relationships with perceived effects of living conditions on military career intentions and willingness to choose the present assignment again. The relationships were positive; that is, the higher the satisfaction, the more likely the perceived effects were reported as positive. Similarly, the more the attitude toward living in a foreign location was seen as having been worsened by the temporary lodging experience, the more likely the perceived effects of living conditions were seen as negative.

The relationships mentioned above ranged from .35 to .45 as measured by the correlation coefficients. Since 1.00 is a perfect relationship, these coefficients indicate low, but statistically reliable, degrees of association.

The majority of respondents in each Service (approximately 60%) believed living conditions had an effect on their job performance. Of this group, the majority in each Service saw the effect as negative. With regard to military career intentions, the majority did not believe that living conditions had an effect (54 to 63%). Of the 36 percent (Navy) to 45 percent (Air Force) who reported an effect, again the majority saw a negative influence. A majority of the respondents in the Army said they would choose their present assignment again, while in the Navy and Air Force the percentages who would and would not choose their present assignment again were similar with a slightly higher percentage saying they would choose it again.

#### Differences by Pay Grade Group, Housing Type, and Household Composition

##### Army

Pay grade group was not related to perceived effects of living conditions on job performance or military career intentions. However, commissioned officers were more positive about choosing their present assignment over again than were the enlisted personnel with a statistically reliable difference between the senior officers and the E-4 to E-6 groups.

Type of housing had statistical effects on each of the questions. Service members living in government-owned housing had a more positive average rating of the perceived effects of living conditions on job performance and military career intentions than did those in government-leased or economy housing. The average rating of residents of government-owned housing was slightly on the positive side of the scale, while the average rating of the other two housing groups were on the negative side of the scale. Individuals in both government-owned and economy housing were more positive about choosing their present assignment again than were those in government-leased housing; the latter group with an average rating on the negative side of the scale. Those in government-owned were also more positive than those in economy housing.

The presence or absence of children in the household did not influence the perceived effects of living conditions.

##### Navy

Pay grade group was statistically related to the perceived effects of living conditions on military career intentions and on willingness to choose the present assignment over again, but not on job performance. Senior officers (O-4 to O-6) had average ratings more positive than the E-4 to E-6 group.

The type of housing (government-owned<sup>6</sup> plus government-leased vs. economy) also showed effects on all three items. Service members living in economy housing were more positive on all three effects than those in government-leased housing. Average differences were small for the effects on job performance and military career intentions and larger for willingness to choose the present assignment again. For perceived effects on job performance and career intentions, both groups had average ratings on the negative side of the scale.

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<sup>6</sup>Less than 1 percent lived in government-owned housing.

Table 1-34  
Responses to Living Conditions Effects Questions (Q137-Q139)

Question	Responses (%)							
	Army		Navy		Air Force		Total	
	Enlisted	Officer	Enlisted	Officer	Enlisted	Officer	Enlisted	Officer
Q137: Which best describes the effect that living conditions on this tour have had on your job performance?	(n = 456)	(n = 162)	(n = 451)	(n = 214)	(n = 332)	(n = 47)	(n = 1239)	(n = 423)
Negative	37.3	35.8	47.2	43.0	46.1	27.7	43.3	38.5
No effect	41.7	37.0	40.8	38.8	39.5	34.0	40.8	37.6
Positive	21.1	27.2	12.0	18.2	14.5	38.3	16.0	23.9
Q138: Which best describes the effect that living conditions on this tour have had on your career intentions?	(n = 457)	(n = 162)	(n = 451)	(n = 214)	(n = 332)	(n = 47)	(n = 1240)	(n = 423)
Negative	28.9	21.0	29.9	14.0	34.6	21.3	30.8	17.5
No effect	55.4	66.0	58.3	73.8	53.3	53.3	55.9	68.8
Positive	15.8	13.0	11.8	12.1	12.0	23.4	13.3	13.7
Q139: Relative to living conditions, if you had a choice and you had it to do over, would you choose your present assignment?	(n = 458)	(n = 162)	(n = 450)	(n = 214)	(n = 332)	(n = 47)	(n = 1240)	(n = 423)
No	41.5	27.2	50.0	32.7	44.3	19.1	45.3	29.1
Unsure	9.4	4.3	8.7	6.1	12.0	2.1	9.8	5.0
Yes	49.1	68.5	41.3	61.2	43.7	78.8	44.8	66.0

Respondents with local national spouses were more likely than the others to prefer to extend at the present location and/or to do a second tour of duty in Italy following completion of the current tour. Respondents with other foreign national spouses were more likely than others to prefer a second foreign tour in a different country. Those with U.S. born spouses more often than the others preferred to return to CONUS.

In general, respondents married to local nationals reported greater usage of economy (versus government) services than the other groups. Those with local national spouses also were somewhat less likely than the other groups to select family housing as an area needing improvement and more likely to select work areas. With respect to problems encountered at the current duty station, respondents with local national spouses more often than the other groups selected medical/dental care among their most serious problems.

#### Respondents Accompanied by Nonsponsored Dependents

Only seven individuals (1.9%) reported having nonsponsored dependents with them in Italy.

#### Respondents Preferring to Leave the Service (Excluding Those Who Had Already Served 20 Years or More)

The sample was highly career motivated. Only 7.5 percent reported a preference for leaving the Service following completion of the current tour (n = 24). No differences were found in distribution by pay grade. A greater proportion of the respondents who preferred to leave the Service were unaccompanied (20.8%) than accompanied (6.8%), and they were more likely to report family adjustment and security problems than were those not preferring to leave.

#### Unaccompanied Respondents

The number of unaccompanied respondents in the Air Force sample was too small for any meaningful analysis (5.1%, n = 20).

### **PERCEIVED EFFECTS OF LIVING CONDITIONS**

One purpose of this study was to attempt to assess what effects the living conditions had on military readiness and retention. The survey did not directly measure readiness or retention. However, in order to obtain information related to these topics, the questionnaire asked the respondents to evaluate the effects of living conditions on this tour (defined as housing, support facilities, costs, transportation, etc.) on their job performance and military career intentions. In addition, respondents were also asked if they would choose their present assignment again in light of the living conditions. Job performance may be considered as one component of readiness and career intention as an indicator of potential retention.

Table I-54 presents service members' perceptions of the effects of living conditions. Very and somewhat negative response categories were combined as were very and somewhat positive responses. With regard to the question on choosing one's present assignment again, definitely and probably not and definitely and probably yes were also combined.

career intentions (64.4%). However, a large percentage said that they would not choose the present assignment over again (40.7%). The number of respondents who answered all of the items that would have been used to predict the responses above was too small for analysis.

Policy Proposals (Q127-Q136). Relative to the policy proposals that would affect assignment to government family housing, the unaccompanied respondents favored the unconditional proposals to extend eligibility to the E-1 to E-3 and E-4 service members with dependents and less than 2 years of service (85.0% in favor), to construct family housing specifically for the lower pay grades with dependents (69.6% in favor), to extend eligibility to all even if it increases the waiting time for everyone (54.7% in favor), and to construct housing for the lower pay grades even if all other construction is delayed (51.8%). Respondents were split (43.1% in favor and 34.2% opposed) regarding the proposal to assign government family housing solely on the basis of bedroom requirements. The least popular of the six proposals on housing assignment was the one to retain current procedures (64.7% opposed).

Regarding government housing occupant allowance and choice proposals, a majority of the unaccompanied supported the maintenance allowance proposal (67.9%) and the proposal to retain some of the BAQ in exchange for living in a unit with fewer bedrooms (59.2%). They were somewhat more in favor of (42.8%) than opposed to (30.4%) the utility allowance proposal, and somewhat more opposed to (43.4%) than in favor of (37.7%) the proposal allowing additional payment beyond the BAQ for living in a unit with more bedrooms.

## Air Force

### Accompanied Female Service Members

Only 5.3 percent of the sample (n = 20) were identified as being accompanied female service members. This number was too small to permit extensive analysis. However, a few responses are noted here.

Accompanied female service members were most often found in the E-4 to E-6 pay grade group. They had more often changed marital status since arriving at the duty station (40.0%) than males (5.3%). They were more often single parents, members of dual career couples, or married with no children than were males. Accompanied female service members much more often than their male counterparts reported working conditions among their most serious problems.

### Accompanied Single Parents

Only 4.7 percent of the sample (n = 14) were accompanied single parents. No analysis was performed on this group.

### Comparisons by Spouse Nationalities

Air Force spouses were 74.4 percent U.S. born (n = 273), 8.7 percent local nationals (n = 32), and 16.9 percent other foreign nationals (n = 62). Local and other foreign national spouses were most often found married to members of the E-7 to E-9 pay grade group.



In general, members of this group more often than those not preferring to leave had spouses in the military and/or spouses who were unemployed and looking for work. They more often reported their sponsors as having a negative attitude toward living conditions at the duty station (55.2%) than those not preferring to leave the Service (34.4%).

Not surprisingly, perhaps, they were more likely to report that their living conditions had a negative effect on career intentions (42.0%) than were the comparison group (27.9%), and were more likely to say they would not choose the present assignment again (61.3%) compared to those not preferring to leave (42.8%). Respondents preferring to leave the Service most often reported their working conditions and transportation as the most serious problems they encountered at the current duty station.

#### Unaccompanied Respondents

Demographics. Only 8.3 percent of the Navy sample were unaccompanied (n = 60). They were mostly in the E-4 to E-9 pay grade groups (70.0%). A large majority (60.0%) were separated, divorced, or widowed, and 68.4 percent had changed marital status since arrival at the current duty station. They were much more likely to be single parents than the accompanied respondents (47.5 versus 2.3%), and they more often reported sharing living expenses (23.1%) compared to the accompanied group (3.3%). Most (86.2%) were permanently unaccompanied.

Reasons for Being Unaccompanied (Q24-Q26). Nearly equal percentages reported that they did not (40.4%) and did (38.6%) want their dependents to accompany them, with 21.1 percent reporting mixed feelings. However, analysis of the reasons given for being unaccompanied revealed that a high percentage (44.9%) were unaccompanied due to dependent-related situations (e.g., spouse job, dependents settling at location of last duty station) compared to reasons beyond their control (e.g., dependents not command sponsored, service member schedule). Approximately 16 percent reported they were unaccompanied because it was their personal preference, and 13.8 percent did not specify a reason.

Impact of Being Unaccompanied on Job Performance (Q28). The majority (51.7%) reported no effect of the unaccompanied status on their job performance, while 21.7 percent reported they were less effective and 26.7 percent reported they were more effective. The number of respondents who answered all the items that would be used to predict the effect of the unaccompanied status on job performance was too small to permit the analysis to be performed.

Problems (Q140-Q142)/Improvements Needed (Q123-Q126). Combining their three choices of problems encountered at the current duty station, like the accompanied respondents, the unaccompanied respondents most frequently reported security (42.9%). After security, they were most concerned with language and cultural differences (36.7%), local telephone service (34.7%), and separation and related problems (28.6%). Combining their four choices of areas needing improvement at the current duty station, the unaccompanied most frequently chose parking facilities (56.3%), entertainment facilities (45.8%), troop barracks (42.6%), family housing (35.4%), and commissaries (35.4%). Approximately the same number of unaccompanied respondents lived in and preferred to live in barracks (29 and 21% respectively) and lived in and preferred to live in economy housing (67 and 62% respectively).

Living Condition Impacts (Q137-Q139). A majority of the unaccompanied respondents reported no effect of their living conditions on their job performance (54.2%) and on their

### Accompanied Single Parents

This group comprised only 2.9 percent of the sample (n = 15) and was too small for analysis or to determine trends.

### Comparisons by Spouse Nationalities

Spouses in the Navy sample were 73.8 percent U.S. born (n = 488), 10.0 percent local nationals (n = 66), and 16.2 percent other foreign nationals (n = 107). Nearly all of the local national and other foreign national spouses were married to service members in the E-4 to E-9 pay grade groups (86.3 and 82.2% respectively). More often than the others, local national spouses were reported to be unemployed and NOT looking for work, while U.S. born spouses were more often reported to be employed.

Respondents with other foreign national spouses were least likely to be living in economy housing, while those with U.S. born spouses were most likely to be living in economy housing. Regarding preferences, the greatest preference for government housing was found among service members married to other foreign nationals (51.0%), compared to those with U.S. born spouses (37.9%) and those with local national spouses (28.6%). Reliance on the service member for transportation was highest among local national spouses (50.8%), next among other foreign national spouses (39.8%), and least among U.S. born spouses (24.9%). Somewhat greater usage of economy services (versus government) was reported by respondents with local national spouses than by the other groups, including food shopping, nonfood shopping, medical/dental, and religious services.

Service members with U.S. born spouses were more likely than others to prefer to return to CONUS following completion of the current tour. Those with other foreign national spouses were more likely to prefer a second tour in a different foreign country than the comparison groups. Respondents with local national spouses more often than others preferred to extend at the current duty station or to do a second tour in Italy.

Service members with U.S. born or other foreign national spouses selected family housing and medical facilities as their top two areas needing improvement. Those with local national spouses selected medical and youth facilities. Security was reported by all three groups as the most serious problem they encountered. Perceived negative effects of living conditions on job performance were highest among those with U.S. born spouses (47.7%) and those with other foreign nationals spouses (45.3%), compared to 34.8 percent of those married to local nationals. However, respondents with other foreign national spouses were more likely to say they would not choose the present assignment again (55.7%) than were those with U.S. born spouses (34.1%) and those married to local nationals (30.3%).

### Respondents Accompanied by Nonsponsored Dependents

Only 2.3 percent of the accompanied sample were identified as having nonsponsored dependents with them (n = 15). No analysis or discussion of trends was possible.

### Respondents Preferring to Leave the Service (Excluding Those Who Had Already Served 20 Years or More)

The sample was highly career motivated. Only 5.7 percent (n = 30) reported a preference to leave the service following completion of the current tour. This group was too small for extensive analysis. However, a few of their responses are noted here.

majority (63.0%) reported no effect of the living conditions on their career intentions, with 31.5 percent reporting a negative effect and 5.6 percent reporting a positive effect. Over one-half (51.9%) said they would not be willing to choose the present assignment again, knowing about the living conditions, while 37.1 percent said they would and 11.1 percent were undecided. No regression analyses were performed on these items due to the small number of respondents who answered all of the items needed for the prediction.

Policy Proposals (Q127-Q136). On the policy proposals that would affect assignment to government family housing, a majority of the respondents supported the unconditional extension of eligibility to the lower enlisted pay grades (74.5%), the assignment of family housing solely on the basis of bedroom requirements (52.1%), and the construction of family housing specifically for the lower enlisted pay grades (76.9%). When potential negative impacts on others were included in the proposals, however, support decreased. Slightly more were opposed to (40.8%) than in favor of (38.8%) the proposal to construct housing for the lower enlisted pay grades if it meant that all other construction might be delayed. Similarly, slightly more were opposed to (46.2%) than in favor of (42.3%) eligibility extension to the lower enlisted pay grades if that would mean increased waiting times for everyone. Retention of the current assignment policy was opposed by the majority (56.5%).

Regarding proposals that would affect allowances and choices of occupants of government family housing, greatest support was found for the utility allowance and maintenance allowance proposals (69.8% in favor and 59.2% in favor respectively). Somewhat more of the respondents were in favor of (46.9%) than opposed to (34.7%) the proposal allowing retention of some of the BAQ in exchange for living in a housing unit with fewer bedrooms. A majority (57.1%) were opposed to the proposal allowing service personnel to pay more than their BAQ in exchange for housing units with more bedrooms than they are qualified to have.

## Navy

### Accompanied Female Service Members

Only 8.6 percent of the accompanied sample were female service members (n = 57). The large majority of these were in the E-4 to E-6 pay grade group (77.2%). They were much more often separated, divorced, widowed, or separated (12.3%) or single, never married (12.3%) than were the accompanied male service members (not currently married total (4.5%). Approximately 39 percent of the accompanied female service members had changed their marital status since arrival at the current duty station, compared to 4.9 percent of the males. Without a spouse as a dependent, they also had fewer live-in dependents (1.5 on average) than males (2.5). Female service members more often reported sharing living expenses with persons other than their dependents (14.5%) than did males (2.0%).

Accompanied female service members were somewhat more likely than males to be negative or uncertain about a 20-year military career. They were less likely to prefer to extend or to serve a second tour in Italy than were the male respondents. They were more likely than males to say they would not choose the present assignment again. Female service members also were less likely than males to select family housing as an area needing improvement, but were more likely to select child care facilities and work areas.

They also were more likely to report working conditions among their most serious problems than those not preferring to leave. Finally, they were more likely than those not preferring to leave to perceive negative effects of living conditions on job performance (66.6 versus 37.0%) and on career intentions (70.0 versus 25.8%), and to be unwilling to choose the present assignment again (63.3 versus 38.9%).

### Unaccompanied Respondents

Demographics. Only 8.2 percent of the sample (n = 55) were unaccompanied. No distribution differences were evident by pay grade group. Close to one-third (30.9%) were separated, divorced, or widowed, compared to only 1.8 percent of the accompanied respondents. One-half of the unaccompanied lived in barracks; the other half, in economy and other types of housing. However, only 22.9 percent preferred barracks living and 62.5 percent preferred economy housing.

Reasons for Being Unaccompanied (Q24-Q26). One-third of the respondents reported not wanting their dependents to accompany them, 18.5 percent had mixed feelings, and 48.1 percent reported that they did want their dependents with them. These responses, however, did not appear to imply personal preferences. Asked to indicate their three most important reasons for being unaccompanied, 56.2 percent reported dependent-related situations (e.g., spouse job, the settling of personal affairs), and 22.4 percent reported reasons beyond their control (e.g., service member schedule, the high cost of relocation). Only 14.1 percent reported they were unaccompanied due to personal preference, and 7.3 percent failed to report a specific reason.

Impact of Being Unaccompanied on Job Performance (Q28). Nearly one-half (49.1%) of the unaccompanied respondents reported that their unaccompanied status had no effect on their job performance, while 30.9 percent reported they were less effective and 20.0 percent reported they were more effective. Prediction analysis was not performed on this item because the number of respondents who answered all of the items needed in the analysis to predict the responses above was too small to produce meaningful results.

Problems (Q140-Q142)/Improvements Needed (Q123-Q126). Combining all three selections of problems from a list of 21 provided, the problem most frequently reported as serious was separation (59.5%). Other problems selected by a meaningful number of the respondents were language and cultural differences (26.2%), transportation (19.0%), local telephone service (19.0%), initial housing costs (16.7%), and temporary housing (16.7%).

With respect to overall satisfaction with the current residence, 30.8 percent reported being dissatisfied and 56.4 percent satisfied, with the remainder neutral. However, greater dissatisfaction than satisfaction was expressed with the following aspects of the residence and associated features and services: laundry facility adequacy, availability and quality of government furniture, water purity, hot water supply, heating system adequacy, and maintenance and repair services on the residence.

Regarding areas needing improvement, the most frequently selected areas were troop barracks (60.4%), exchanges (40.8%), family housing (38.8%), and work areas (37.5%). Other highly selected areas for improvement were family entertainment (36.7%), permanent housing (32.7%), and parking facilities (28.6%).

Living Condition Impacts (Q137-Q139). Approximately equal percentages of respondents reported that their living conditions had no effect (44.4%) or a negative effect (46.3%) on their job performance, with only 9.3 percent reporting a positive effect. A

claims through the government on housing and automobile thefts and vandalism. (Army E-8)

Respondents were asked to select four areas for which they felt construction, expansion, leasing, or renovation was needed to improve living and working conditions. Across all three Services, the following three areas were chosen as the most needed improvements in Italy: (1) family housing, (2) medical facilities, and (3) commissaries. For Navy personnel, parking was chosen by one-half of the sample as a needed area of improvement. Over three-quarters of the Air Force sample selected medical facilities among their four choices for improvement. Respondents in Italy, when given a choice in terms of areas of needed improvement, very definitely gave priority to family housing and medical facilities over most other facilities which are part of the living and working environment. This finding coincides with the previous comments regarding the lack of adequate facilities in the residences and the inadequate Italian medical care or the distances one has to drive to reach adequate U.S. medical care.

Policy proposals that were favored by the majority of respondents dealt with extension of eligibility and construction of family housing for those currently not eligible (i.e., less than 2 years of service). Another proposal that was highly favored suggested an allowance to service members for doing minor repair work on their housing. Policies that were opposed by the majority either had negative consequences for higher pay grades or could result in out-of-pocket expenses. Of interest is that very few respondents were in favor of making no policy changes.

Respondents were asked to evaluate how the living conditions in Italy affected their job performance, military career intentions, and their willingness to choose their present assignment over again. The first set of results revealed that a much higher percentage of respondents felt that the living conditions in Italy have had negative effects on their job performance, rather than a positive effect. This was found across all three Services, but was especially true for the Navy and Air Force samples. Only 14 percent of the Navy and 17.5 percent of the Air Force samples reported that living conditions have had positive effects on job performance, whereas about 45 percent of both samples reported negative consequences on job performance as a result of living conditions. However, approximately half of the respondents (in each Service) said that they did not regret the choice of their present assignment, despite the perceived negative consequences of living conditions on job performance.

In regards to military career intentions, the majority of respondents in all three Services did not feel that the living conditions affected their intentions of completing a military career. However, of those who did feel that the Italian living conditions influenced their career intentions, twice as many respondents in the Army and Air Force felt a negative effect rather than a positive one and three times as many in the Air Force perceived the living condition effects as being negative rather than being positive.

To understand and determine why service members perceived that Italian living conditions had negative (or positive) effects on their job performance, military career intentions and willingness to choose their present assignment again, a statistical procedure was employed. This procedure explains what it is about their living conditions that makes them believe (for those that do) that it affects their military career. Results revealed that overall satisfaction with the adequacy and comfort of one's residence was the major contributor to perceptions that Italian living conditions affect one's military career. This means that those who are dissatisfied with their residence were more likely to perceive that their living conditions negatively affected their job performance,

military career intention, and their willingness to choose Italy as the location for an assignment again. Other components of living conditions that negatively affected their perceived job performance, military career intentions, and willingness to be stationed in Italy again included negative temporary housing experiences and long commute times to the military installations.

With regard to the special groups in Italy (e.g., those married to local national spouses, women military personnel, unaccompanied personnel) few if any differences were noted. This is very likely due to the relatively small sample sizes obtained for these groups. Those findings that were observed to be consistent among all three Services are summarized briefly. Accompanied females were more likely than accompanied males to be single parents and were more likely to be undecided about their military career intentions. They were less likely to be willing to choose their present assignment over again. Another finding across all three Services was that those service members who were married to local national spouses were more in favor of extending their current assignment in Italy than were those married to U.S. born or foreign national spouses. They were also more likely to prefer economy quarters than were the other groups. In all three Services, there were very few who preferred to leave the Service. The percentages ranged from 5.7 percent for the Army and Navy respondents, to 7.5 percent for the Air Force sample. In the Army sample, those intending to remain in the Service were twice as likely to have had a sponsor than those intending to leave the Service.

## CONCLUSIONS

1. Reporting of serious problems and choices of areas needing improvement in Italy varied considerably by Service. In the Army sample, local telephone service and spouse employment were the two most frequently reported serious problems, with family housing, medical facilities, and commissaries most often selected as needing improvement. In the Navy sample, security was by far the most frequently reported serious problem, with parking facilities, family housing, medical facilities, and commissaries selected for improvement. In the Air Force sample, initial housing costs and medical/dental care were most often reported as serious problems, with medical facilities and family housing topping the list of areas needing improvement.

2. Economy housing was both the most likely type of housing to be occupied (52 to 90%) and the most preferred (50 to 60%) in all three Services. Government-leased housing was the least preferred (9 to 12%), probably due in part to the location of these units in relationship to the duty station and government facilities. Very few respondents lived in government-owned housing in Italy (25% Army, 1% Navy, 5% Air Force).

3. Service members were generally not satisfied with temporary lodgings because of the size of the quarters, inadequate kitchen facilities, and lack of play space for children. Overall dissatisfaction with temporary lodging facilities was especially high among Army and Air Force respondents.

4. The majority of respondents in all three Services (55 to 59%) were satisfied with the comfort and adequacy of their permanent housing. Dissatisfaction was most frequently caused by inadequate heating systems and inconvenience of the residence to major medical facilities. For those with children, lack of recreational opportunities was a major cause of dissatisfaction.

5. Overall satisfaction with the residence was the most important predictor of perceived effects of living conditions on job performance, military career intentions, and willingness to choose the present assignment over. More satisfaction with the residence led to a greater probability of perceived positive living conditions effects.

6. The problems and situations encountered by Service members and their families in Italy varied by Service and included the following: (a) lack of job opportunities for spouses, especially among enlisted personnel in the Army and Air Force; (b) long commuting distance/times to installations and government facilities, exasperated by traffic jams (especially for Navy personnel in Naples); (c) lack of security and safety (again especially among Navy personnel in Naples); (d) frequent tremors and earthquakes; (e) lack of adequate local telephone service; (f) lack of adequate medical care within a reasonable commuting distance; (g) poor heating, water, and kitchen facilities in permanent residences; and (h) language and cultural differences.

7. Service members were quite strongly in favor (52 to 75%) of proposals to extend eligibility to and/or to construct government family housing for those families currently not eligible. The respondents also favored a maintenance allowance proposal (68 to 76%) and one that would allow retention of some of the BAQ in exchange for living in a housing unit with fewer bedrooms (57 to 63%).

## RESULTS—JAPAN/OKINAWA (NAVY, AIR FORCE, MARINE CORPS)

### PROFILE OF SAMPLES

Three Services were represented in the sample from Japan/Okinawa, the Navy, Air Force, and Marine Corps. Stationed mainly on Okinawa, this was the only Marine Corps sample included in the study. The return rates (see Table 3) show that, in general, we can be moderately confident that the Navy and Air Force data are representative of the population of these Services at this location. For the Marine Corps sample, confidence is somewhat lower.

The major focus of the study was on service members accompanied by dependents. Special analyses were also conducted for those service members who had dependents but were unaccompanied. The Marine Corps sample showed 44.4 percent unaccompanied. Due to this large proportion, data on some of the variables will be shown separately for the accompanied and unaccompanied Marine Corps personnel. Where no differentiation is shown, the data refer only to the accompanied Marine Corps personnel.

In the sections that follow, the results are primarily reported in tables of percentages. In some cases, the percentage columns may not add to 100 percent due to rounding.

#### Demographic Characteristics

This section presents the demographic characteristics of the three Service samples.

##### Pay Grade

Table J-1<sup>7</sup> shows the distribution of pay grade groups by Service. The largest pay grade groups in the three Services were the E-4 to E-6 and the E-7 to E-9 groups, with approximately 49 to 56 percent of each of the service samples made up of these two groups. Officers constituted a larger proportion of the Navy and accompanied Marine Corps samples (somewhat over 1/3) than of the unaccompanied Marine Corps and Air Force samples (slightly less than 30%). The E-1 to E-3 groups for all three Services and the E-4 to E-6 group in the Marine Corps sample had lower return rates than the other pay grade groups (as discussed on p. 8). The percentages in Table J-1 are not an accurate reflection of the pay grade groups in all three Services in the population in Japan/Okinawa. The E-1 to E-3 groups and the E-4 to E-6 group in the Marine Corps are underrepresented and other pay grades are overrepresented.

Pay grades were grouped to facilitate ease of analysis, presentation, and interpretation. It is of some interest, however, to note the distributions of individual pay grades within each pay grade group. The individual distributions of pay grades, for all three Services, are as follows: (1) The E-1 to E-3 group consists mainly of E-3s; (2) the E-4 to E-6 group consists of more E-5s and E-6s than E-4s; (3) the E-7 to E-9 group consists chiefly of E-7s; (4) the O-1 to O-3 group consists chiefly of O-3s; and (5) the O-4 to O-6 group has more O-4s, than O-5s or O-6s.

Among the relatively small number of warrant officers, the Navy sample had a much higher number of W-2s than W-3 to W-4s, while the opposite was true for the Marine Corps sample. There were no warrant officers in the Air Force.

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<sup>7</sup> Prefix of the table numbers identifies survey results by country: J = Japan.



Table J-1  
Pay Grade Group by Service (Q1-Q2)

Pay Grade Group	Navy		Air Force		Marine Corps				Total	
	n	%	n	%	Accompanied n	%	Unaccompanied n	%	n	%
E-1 to E-3	148	8.0	270	14.4	61	5.8	104	12.5	583	10.4
E-4 to E-6	496	27.0	546	29.1	279	26.6	288	34.4	1609	28.7
E-7 to E-9	487	26.5	511	27.2	236	22.6	175	20.9	1409	25.2
W-1 to W-4	57	3.1	--	--	89	8.5	31	3.7	177	3.2
O-1 to O-3	304	16.5	320	17.0	230	22.0	108	12.9	962	17.2
O-4 to O-6	346	18.8	231	12.3	153	14.6	130	15.6	860	15.4
Total	1838	99.9	1878	100.0	1048	100.1	836	100.0	5600	100.1

### Sex, Marital Status, and Spouse Nationality (Q3-Q6)

The percent of females in the three Service samples was low. The very large majority of respondents were males, ranging from 98.4 percent of the accompanied Marine Corps personnel to 94.1 percent of the Navy. Reflecting how the sample was chosen, 98 percent of the samples were currently married, with the exception of the unaccompanied Marine Corps personnel. In the latter group, 90 percent were married with almost all of the rest separated, divorced, or widowed since arriving at their current duty station. Between 27 and 40 percent of the accompanied service members in each sample were married to local national spouses. In the Navy and Air Force samples, there were almost equal numbers of local national and other foreign national spouses; among the accompanied Marine Corps personnel, there were about twice as many local nationals than other foreign national spouses.

### Household Composition and Dependents

Table J-2 shows the composition of the households by Service.

Table J-2  
Household Composition (Q7)

Composition	Navy (n = 1506)	Air Force (n = 1689)	Accompanied Marine Corps (n = 919)
Households without children	22.2	17.3	19.1
Households with children	77.8	82.7	80.9
Single parent households	1.4	1.8	2.8
Households with relatives as dependents	2.9	3.1	2.8
Dual career households	4.5	2.5	2.1

The very large majority of each Service (78% to 83%) had households with children. Households with single parent service members, those that included relatives, and those with two service members were relatively rare.

For all three Services, members of the junior enlisted group (E-1 to E-3) were more likely than other pay grade groups not to have children. In the Navy and Air Force samples, the junior officers (O-1 to O-3) were also slightly less likely to have children. In all pay grade groups in all Services, with the exception of the E-1 to E-3 groups, 65 percent or more of the service members had children living with them. Among the E-1 to E-3s, the percent of those with children was approximately 50 to 60 percent.

**Household Size (Q14)/Age of Children.** The average number of live-in dependents ranged from 2.4 to 2.6. The greatest frequency (modal group) of dependents was three. Approximately one-third in each Service had three dependents living with them.

Table J-3 shows the percentage of service members who had children or other dependents in various age groups. The three Service samples differed very little in terms of the percentages having children in each age group. Since the respondents frequently had children in more than one age group, the percentages do not add to 100 percent.

Table J-3  
Ages of Children (Q8-Q11)

Age Group	Navy (n = 1459)	Air Force (n = 1642)	Accompanied Marine Corps (n = 902)
Q8: Children under 2	21.1	23.7	22.9
Q9: Children 2 to 5	27.7	29.5	33.3
Q10: Children 6 to 12	42.2	44.6	46.2
Q11: Children 13 to 18	25.0	26.8	24.9

The most frequently represented age group was 6 to 12 years. Between 21 and 24 percent had infants and toddlers (under 2 years), while approximately 25 percent had teenagers. The table does not show the percentage who had children in more than one age group.

Table J-4 shows the number and percentage of children in each age group.

Table J-4  
Number of Children in Each Age Group

Age Group	Navy		Air Force		Marine Corps		Total	
	n	%	n	%	n	%	n	%
Q8: Children under 2	337	15.2	427	15.9	220	14.3	984	15.2
Q9: Children 2 to 5	494	22.3	582	21.6	368	24.0	1444	22.4
Q10: Children 6 to 12	870	39.3	1055	39.3	634	41.3	2559	39.8
Q11: Children 13 to 18	514	23.2	623	23.2	313	20.4	1450	22.5
Total	2215		2687		1535		6437	

Command Sponsorship of Dependents (Q13). Less than 2 percent of the Navy and Air Force samples had dependents with them who were not command sponsored. In contrast, among the accompanied Marine Corps personnel, 22 percent of the sample had nonsponsored dependents living with them. Comparisons of service members with and without command sponsorship for their live-in dependents are shown in special groups (p.333).

### Spouse Employment

Table J-5 shows percentages of respondents by spouse employment status--both currently and in CONUS prior to the current foreign tour of duty.

All Services showed a high rate of spouse unemployment, ranging from 61 to 68 percent in the three Services. This rate is 20 to 26 percent higher than in CONUS. Perhaps of most interest, close to 20 percent of the spouses were unemployed and looking for work. This compares to 6 percent or less who were in a similar situation in CONUS.

Spouses of E-1 to E-3 respondents were more likely to be unemployed and looking for a job and less likely to be unemployed and not looking than those of the other pay grades. Conversely, spouses of the highest pay grade group (O-4 to O-6) were more likely to be unemployed and not looking for work. No consistent or strong differences among pay grade groups were found in the percentage of spouses currently employed.

### Family/Spouse Income (Q147-Q148)

Table J-6 shows the median family income for the previous month by pay grade group. Total family income generally reflected pay grade group levels. The reader is reminded that the median incomes reported are affected by unequal representation of pay grades within each group.

Table J-7 shows the percentage of spouses reported to have no income, as well as the median incomes of those with income during the previous month.

The percentage of spouses without income for the previous month ranged from 53 to 70 percent across all pay grades and Services. Among those with incomes, the Navy and Marine Corps average median incomes were slightly higher (\$673 and \$666 respectively) than among spouses of Air Force respondents (\$549).

### Special Groups

Table J-8 presents the number and percentage of special groups within each Service sample.

Differences between groups and their opposites (e.g., female service members versus male service members) are presented with special groups (p. 333).

### Service History

Service history consists of three factors dealing with time: prior time on active duty in foreign locations; time at the present post, base, or duty station; and time remaining in the tour.

Table J-5

Spouse Employment Status--Japan/CONUS (Q143-Q146)

Status	Navy			Marine Corps			Air Force			Total		
	Japan n	%	CONUS n	Japan n	%	CONUS n	Japan n	%	CONUS n	Japan n	%	CONUS n
<b>Unemployed, not looking for work</b>												
E-1 to E-3	17	23.0	8	20	39.2	15	73	31.6	40	110	30.9	63
E-4 to E-6	142	37.9	54	107	44.8	72	169	36.1	116	418	38.6	242
E-7 to E-9	196	47.5	111	91	44.8	59	32.2	183	146	470	44.7	316
W-1 to W-4	27	52.9	14	39	51.3	28	41.8	--	--	66	52.3	42
O-1 to O-3	99	37.8	75	89	45.4	77	135	48.7	96	323	43.9	248
O-4 to O-6	137	47.2	97	79	59.4	49	40.2	111	85	327	52.0	231
Total	618	42.2	399	425	47.3	300	671	41.5	483	1714	43.1	1142
<b>Unemployed, looking for work</b>												
E-1 to E-3	24	32.4	3	18	35.3	3	8.3	32.9	14	118	33.1	20
E-4 to E-6	94	25.1	13	57	23.8	18	9.0	25.9	31	272	25.1	62
E-7 to E-9	72	17.4	16	42	20.7	9	4.9	18.2	25	193	18.4	50
W-1 to W-4	7	13.7	1	15	19.7	4	6.0	--	--	22	17.2	5
O-1 to O-3	42	16.0	11	40	20.4	4	2.1	17.7	8	131	17.8	23
O-4 to O-6	35	12.1	3	14	10.5	1	0.8	11.2	3	72	11.4	7
Total	274	18.7	47	186	20.7	39	4.9	21.5	81	808	20.3	167
<b>Employed full time (civilian)</b>												
E-1 to E-3	12	16.2	21	9	17.6	14	38.9	12.6	46	50	14.0	81
E-4 to E-6	46	12.3	113	27	11.3	73	36.3	16.0	153	148	13.7	339
E-7 to E-9	76	18.4	101	39	19.2	88	48.1	19.3	146	199	18.9	335
W-1 to W-4	8	15.7	11	9	34.4	23	34.3	--	--	17	13.3	34
O-1 to O-3	50	19.1	93	33	16.8	80	42.3	10.1	82	111	15.1	255
O-4 to O-6	32	11.0	70	15	11.3	40	32.8	11.7	50	71	11.3	160
Total	224	15.3	409	132	14.7	318	39.8	14.8	477	596	15.0	1204
<b>Employed P/T or intermittently (civilian)</b>												
E-1 to E-3	15	20.3	6	4	7.8	4	11.1	20.8	20	67	18.8	30
E-4 to E-6	57	15.2	38	38	15.9	26	12.9	17.7	72	178	16.5	136
E-7 to E-9	63	15.3	28	28	13.8	24	13.1	18.6	52	172	16.4	104
W-1 to W-4	8	15.7	6	10	13.2	9	13.4	--	--	18	14.1	15
O-1 to O-3	56	21.4	23	29	14.8	22	11.6	17.7	43	134	18.2	88
O-4 to O-6	69	23.8	55	19	14.3	26	21.3	22.3	41	134	21.3	122
Total	268	18.3	196	128	14.3	111	13.9	19.0	228	703	17.7	495
<b>In the military</b>												
E-1 to E-3	6	8.1	5	0	0.0	0	0.0	2.2	6	11	3.1	11
E-4 to E-6	36	9.6	39	10	4.2	12	6.0	4.3	28	66	6.1	79
E-7 to E-9	6	1.5	9	3	1.5	3	1.6	1.8	9	17	1.6	21
W-1 to W-4	1	2.0	0	3	3.9	3	4.5	--	--	4	3.1	3
O-1 to O-3	15	5.7	15	5	6.9	6	3.2	5.8	21	36	4.9	42
O-4 to O-6	16	5.5	16	6	4.5	6	4.9	1.0	2	24	3.8	24
Total	80	5.5	84	27	3.0	30	3.8	3.2	66	158	4.0	180

Table J-6

Median Family Income for Previous Month by Pay Grade Group (Q147)

Pay Grade Group	Navy		Air Force		Marine Corps		Total	
	n	\$	n	\$	n	\$	n	\$
E-1 to E-3	72	1385	225	1300	48	1655	345	1300
E-4 to E-6	355	1399	442	1479	228	1603	1025	1499
E-7 to E-9	386	2012	410	1922	197	2140	993	2000
W-1 to W-4	45	2500	--	--	74	2205	119	2299
O-1 to O-3	244	2585	265	2503	184	2605	693	2562
O-4 to O-6	272	3754	190	3504	123	3580	585	3599

Table J-7

Spouse Income by Pay Grade Group (Q148)

Pay Grade Group	Navy		Air Force		Marine Corps		Total	
	n	%	n	%	n	%	n	%
<u>No Income</u>								
E-1 to E-3	36	52.9	129	62.0	31	70.5	196	61.2
E-4 to E-6	200	62.9	255	62.2	146	68.2	601	63.8
E-7 to E-9	240	65.8	242	62.4	113	62.8	595	63.8
W-1 to W-4	30	68.2	--	--	52	70.3	83	69.7
O-1 to O-3	127	53.8	172	67.5	116	65.2	415	62.0
O-4 to O-6	160	59.3	122	63.5	80	66.1	362	62.1
Total	793	61.0	920	63.3	538	66.3	2252	63.1
<u>With Income</u>								
E-1 to E-3	32	500	79	420	13	583	124	496
E-4 to E-6	118	705	155	503	68	598	341	597
E-7 to E-9	125	598	146	542	67	602	338	598
W-1 to W-4	14	998	--	--	22	705	36	897
O-1 to O-3	109	750	83	830	62	725	254	775
O-4 to O-6	110	655	70	475	41	800	221	698
Total	508	673	533	549	273	666	1314	647

Table J-8  
Special Groups

Age Group	Navy		Air Force		Marine Corps		Total	
	n	%	n	%	n	%	n	%
Accompanied female service members	89	5.9	71	4.2	15	1.6	175	4.2
Accompanied single parents	21	1.4	31	1.8	9	0.9	61	1.4
Service members with local national spouses	303	20.3	248	14.9	162	17.8	713	17.5
Service members with nonsponsored dependents	26	1.7	22	1.3	203	22.1	251	6.1
Respondents preferring to leave the service (excluding those with 20 years or more service)	88	5.9	103	6.1	52	5.7	243	5.9
Unaccompanied service members	221	12.9	91	5.1	736	44.4	1048	20.3

#### Prior Foreign Experience (Q17)

The majority of each sample had prior experience in foreign locations. Approximately 50 percent of each sample (with the exception of unaccompanied Marine Corps personnel, 33.3%) had 2 years or more prior foreign duty. The percentages of service members having no prior foreign military duty ranged from 35.5 percent of the Air Force respondents to 18.2 percent of the accompanied Marine Corps sample.

#### Time Spent/Remaining in the Current Tour (Q18/Q19)

Most of the respondents had been at their present duty station for more than one year, 57 percent of the accompanied Marine Corps personnel to 75 percent of the Air Force, with 27 to 41 percent having more than 2 years. The largest percent of each Service sample (with the exception of unaccompanied Marine Corps personnel) had more than one year remaining in their current tour. The short-termers, those with 6 months or less remaining in the current tour, ranged from 28.6 percent of the accompanied Marines to 19.5 percent of the Navy sample.

These data imply that most of the respondents had knowledge of living in foreign countries, were well established in their living situation and could look forward to continuing to live in their current environment for more than one year.

#### Military Career Intentions

Table J-9 presents the data on career intention with regard to remaining at least 20 years in the Service.

Command Sponsorship of Dependents (Q13). Less than 2 percent of the Navy and Air Force samples had dependents with them who were not command sponsored. In contrast, among the accompanied Marine Corps personnel, 22 percent of the sample had nonsponsored dependents living with them. Comparisons of service members with and without command sponsorship for their live-in dependents are shown in special groups (p.333).

### Spouse Employment

Table J-5 shows percentages of respondents by spouse employment status--both currently and in CONUS prior to the current foreign tour of duty.

All Services showed a high rate of spouse unemployment, ranging from 61 to 68 percent in the three Services. This rate is 20 to 26 percent higher than in CONUS. Perhaps of most interest, close to 20 percent of the spouses were unemployed and looking for work. This compares to 6 percent or less who were in a similar situation in CONUS.

Spouses of E-1 to E-3 respondents were more likely to be unemployed and looking for a job and less likely to be unemployed and not looking than those of the other pay grades. Conversely, spouses of the highest pay grade group (O-4 to O-6) were more likely to be unemployed and not looking for work. No consistent or strong differences among pay grade groups were found in the percentage of spouses currently employed.

### Family/Spouse Income (Q147-Q148)

Table J-6 shows the median family income for the previous month by pay grade group. Total family income generally reflected pay grade group levels. The reader is reminded that the median incomes reported are affected by unequal representation of pay grades within each group.

Table J-7 shows the percentage of spouses reported to have no income, as well as the median incomes of those with income during the previous month.

The percentage of spouses without income for the previous month ranged from 53 to 70 percent across all pay grades and Services. Among those with incomes, the Navy and Marine Corps average median incomes were slightly higher (\$673 and \$666 respectively) than among spouses of Air Force respondents (\$549).

### Special Groups

Table J-8 presents the number and percentage of special groups within each Service sample.

Differences between groups and their opposites (e.g., female service members versus male service members) are presented with special groups (p. 333).

### Service History

Service history consists of three factors dealing with time: prior time on active duty in foreign locations; time at the present post, base, or duty station; and time remaining in the tour.



Spouse Employment Status--Japan/CONUS (Q145-Q146)

Status	Navy			Marine Corps			Air Force			Total		
	Japan n	%	CONUS n	Japan n	%	CONUS n	Japan n	%	CONUS n	Japan n	%	CONUS n
<b>Unemployed, not looking for work</b>												
E-1 to E-3	17	23.0	8	20	39.2	15	73	41.7	40	110	30.9	63
E-4 to E-6	142	37.9	54	107	44.8	72	169	35.8	116	418	38.6	242
E-7 to E-9	196	47.5	111	91	44.8	59	183	32.2	146	470	44.7	316
W-1 to W-4	27	52.9	14	39	51.3	28	--	41.8	--	66	52.3	42
O-1 to O-3	99	37.8	75	89	45.4	77	135	48.7	96	323	43.9	248
O-4 to O-6	137	47.2	97	79	59.4	49	111	40.2	85	327	52.0	231
Total	618	42.2	359	425	47.3	300	671	37.6	483	1714	43.1	1142
<b>Unemployed, looking for work</b>												
E-1 to E-3	24	32.4	3	18	35.3	3	76	8.3	14	118	33.1	20
E-4 to E-6	94	25.1	13	57	23.8	18	121	9.0	31	272	25.1	62
E-7 to E-9	72	17.4	16	42	20.7	9	79	4.9	25	193	18.4	50
W-1 to W-4	7	13.7	1	15	19.7	4	--	6.0	--	22	17.2	5
O-1 to O-3	42	16.0	11	40	20.4	4	49	2.1	8	131	17.8	23
O-4 to O-6	35	12.1	3	14	10.5	1	23	0.8	3	72	11.4	7
Total	274	18.7	47	186	20.7	39	348	4.9	81	808	20.3	167
<b>Employed full time (civilian)</b>												
E-1 to E-3	12	16.2	21	9	17.6	14	29	38.9	46	50	14.0	81
E-4 to E-6	46	12.3	113	27	11.3	73	75	36.3	153	148	13.7	339
E-7 to E-9	76	18.4	101	39	19.2	88	84	48.1	199	199	18.9	335
W-1 to W-4	8	15.7	11	34.4	9	23	--	34.3	--	17	13.3	34
O-1 to O-3	50	19.1	93	33	16.8	80	28	42.3	10.1	111	15.1	255
O-4 to O-6	32	11.0	70	15	11.3	40	24	32.8	50	71	11.3	160
Total	224	15.3	409	132	14.7	318	240	39.8	477	596	15.0	1204
<b>Employed P/T or intermittently (civilian)</b>												
E-1 to E-3	15	20.3	6	4	7.8	4	48	11.1	20	67	18.8	30
E-4 to E-6	57	15.2	38	38	15.9	26	83	12.9	72	178	16.5	136
E-7 to E-9	63	15.3	28	28	13.8	24	81	13.1	52	172	16.4	104
W-1 to W-4	8	15.7	6	10	13.2	9	--	13.4	--	18	14.1	15
O-1 to O-3	56	21.4	23	29	14.8	22	49	11.6	43	134	18.2	88
O-4 to O-6	69	23.8	55	19	14.3	26	46	21.3	41	134	21.3	122
Total	268	18.3	156	128	14.3	111	307	13.9	228	703	17.7	495
<b>In the military</b>												
E-1 to E-3	6	8.1	5	0	0.0	0	5	0.0	6	11	3.1	11
E-4 to E-6	36	9.6	39	10	4.2	12	20	6.0	28	66	6.1	79
E-7 to E-9	6	1.5	9	3	1.5	3	8	1.6	9	17	1.6	21
W-1 to W-4	1	2.0	0	3	3.9	3	--	4.5	--	4	3.1	3
O-1 to O-3	15	5.7	15	5	2.6	6	16	3.2	21	36	4.9	42
O-4 to O-6	16	5.5	16	6	4.5	6	2	4.9	2	24	3.8	24
Total	80	5.5	84	27	3.0	30	51	3.8	66	158	4.0	180

Table J-6

## Median Family Income for Previous Month by Pay Grade Group (Q147)

Pay Grade Group	Navy		Air Force		Marine Corps		Total	
	n	\$	n	\$	n	\$	n	\$
E-1 to E-3	72	1385	225	1300	48	1655	345	1300
E-4 to E-6	355	1399	442	1479	228	1603	1025	1499
E-7 to E-9	386	2012	410	1922	197	2140	993	2000
W-1 to W-4	45	2500	--	--	74	2205	119	2299
O-1 to O-3	244	2585	265	2503	184	2605	693	2562
O-4 to O-6	272	3754	190	3504	123	3580	585	3599

Table J-7

## Spouse Income by Pay Grade Group (Q148)

Pay Grade Group	Navy		Air Force		Marine Corps		Total	
	n	%	n	%	n	%	n	%
<u>No Income</u>								
E-1 to E-3	36	52.9	129	62.0	31	70.5	196	61.2
E-4 to E-6	200	62.9	255	62.2	146	68.2	601	63.8
E-7 to E-9	240	65.8	242	62.4	113	62.8	595	63.8
W-1 to W-4	30	68.2	--	--	52	70.3	83	69.7
O-1 to O-3	127	53.8	172	67.5	116	65.2	415	62.0
O-4 to O-6	160	59.3	122	63.5	80	66.1	362	62.1
Total	793	61.0	920	63.3	538	66.3	2252	63.1
<u>With Income</u>								
	n	\$	n	\$	n	\$	n	\$
E-1 to E-3	32	500	79	420	13	583	124	496
E-4 to E-6	118	705	155	503	68	598	341	597
E-7 to E-9	125	598	146	542	67	602	338	598
W-1 to W-4	14	998	--	--	22	705	36	897
O-1 to O-3	109	750	83	830	62	725	254	775
O-4 to O-6	110	655	70	475	41	800	221	698
Total	508	673	533	549	273	666	1314	647

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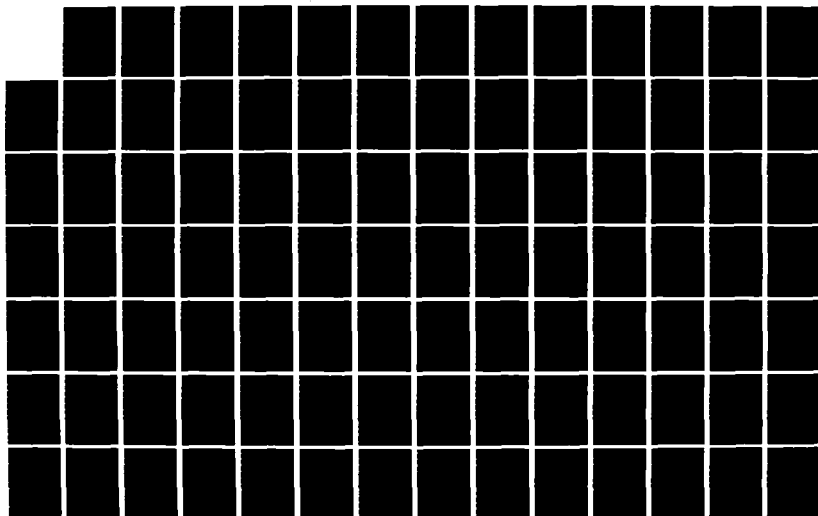
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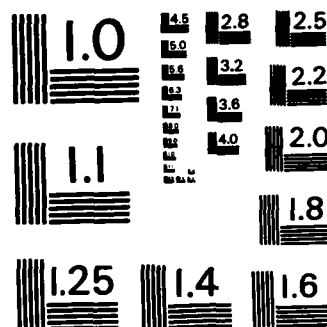
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**Table J-8**  
**Special Groups**

Age Group	Navy		Air Force		Marine Corps		Total	
	n	%	n	%	n	%	n	%
Accompanied female service members	89	5.9	71	4.2	15	1.6	175	4.2
Accompanied single parents	21	1.4	31	1.8	9	0.9	61	1.4
Service members with local national spouses	303	20.3	248	14.9	162	17.8	713	17.5
Service members with nonsponsored dependents	26	1.7	22	1.3	203	22.1	251	6.1
Respondents preferring to leave the service (excluding those with 20 years or more service)	88	5.9	103	6.1	52	5.7	243	5.9
Unaccompanied service members	221	12.9	91	5.1	736	44.4	1048	20.3

#### Prior Foreign Experience (Q17)

The majority of each sample had prior experience in foreign locations. Approximately 50 percent of each sample (with the exception of unaccompanied Marine Corps personnel, 33.3%) had 2 years or more prior foreign duty. The percentages of service members having no prior foreign military duty ranged from 35.5 percent of the Air Force respondents to 18.2 percent of the accompanied Marine Corps sample.

#### Time Spent/Remaining in the Current Tour (Q18/Q19)

Most of the respondents had been at their present duty station for more than one year, 57 percent of the accompanied Marine Corps personnel to 75 percent of the Air Force, with 27 to 41 percent having more than 2 years. The largest percent of each Service sample (with the exception of unaccompanied Marine Corps personnel) had more than one year remaining in their current tour. The short-termers, those with 6 months or less remaining in the current tour, ranged from 28.6 percent of the accompanied Marines to 19.5 percent of the Navy sample.

These data imply that most of the respondents had knowledge of living in foreign countries, were well established in their living situation and could look forward to continuing to live in their current environment for more than one year.

#### Military Career Intentions

Table J-9 presents the data on career intention with regard to remaining at least 20 years in the Service.

Table J-9

## Career Intentions (Q20)

Career Intention	Navy		Air Force		Accomp.		Marine Corps		Unaccomp.		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
Definitely do not intend to remain at least 20 years	48	3.2	37	2.2	21	2.3	29	3.9	135	2.8		
Probably will not remain at least 20 years	47	3.2	56	3.3	20	2.2	25	3.4	148	3.1		
Uncertain	160	10.7	159	9.4	71	7.7	97	13.2	487	10.1		
Probably will remain at least 20 years	285	19.1	389	23.1	167	18.2	152	20.7	993	20.6		
Definitely intend to remain at least 20 years	646	43.3	771	45.8	505	55.0	352	47.9	2274	47.1		
Already have served 20 years or more	306	20.5	271	16.1	135	14.7	80	10.9	792	16.4		
Total	1492	100.0	1683	99.9	919	100.1	735	100.0	4829	100.1		

Between 62 and 73 percent of each Service sample said they would probably or definitely remain in the Service for 20 years. A very large majority of this "yes" group answered "definitely yes." In addition, 10.9 percent (unaccompanied Marine Corps personnel) to 20.5 percent (Navy) said they already had 20 years or more of service. Less than 8 percent in each Service said they probably or definitely would not stay in the Service at least 20 years. Uncertainty ranged from 7.7 percent (accompanied Marine Corps personnel) to 13.2 percent (unaccompanied Marine Corps personnel).

The E-1 to E-3 group showed a slightly higher percent who probably or definitely would not remain in the Service for 20 years and a much higher percentage who were uncertain than did the other pay grade groups. However, because the return rate for the E-1 to E-3 pay grades was low, these percentages may not accurately reflect the intentions of the entire E-1 to E-3 population.

#### Preferences After Completion of the Current Tour

Table J-10 presents the preferences of the respondents after completion of their current tour.

With the exception of the unaccompanied Marine Corps respondents who expressed an overwhelming preference to go back home, approximately one-half of each Service sample wished to return to CONUS. Again except for the unaccompanied Marine Corps personnel, from 14 to 26 percent of each sample wished to extend or do another full tour in Japan/Okinawa, and approximately 6 percent in each sample preferred to leave the Service.

Differences were evident by pay grade group. In general, officers showed a higher percentage wishing to return to CONUS. The E-7 to E-9 respondents, frequently married to local nationals, were more likely than others to prefer another full tour or an extended tour in Japan/Okinawa.

Table J-10

## Preferences After Completion of the Current Tour (Q21)

Preference	Navy		Air Force		Marine Corps		Total	
	n	%	n	%	Accomp. n	Unaccomp. n	n	%
Another full tour in present country	202	13.6	89	5.3	127	43	461	9.6
Extend (for less than a full tour)	109	7.3	154	9.2	114	16	393	8.2
Another full tour in different country	231	15.5	287	17.1	81	22	621	12.9
Return to CONUS	721	48.4	907	53.9	475	579	2682	55.6
Leave the Service	88	5.9	102	6.1	52	38	280	5.8
Unsure/no preference	138	9.3	143	8.5	70	34	385	7.9
Total	1489	100.0	1682	100.1	919	732	4822	100.0



## PERMANENT HOUSING

Beginning with this section, the data are based only on the accompanied service member responses. Additional data on the unaccompanied respondents will be found with special groups (p. 333).

This section presents data concerning service members' housing, as well as their housing preferences.

### Time in Permanent Housing

A vast majority of respondents in all three Services (94 to 97 percent of those responding to the question) were in permanent housing at the time of the survey. Table J-11 shows the length of time in permanent housing.

Table J-11  
Length of Time in Permanent Housing (Q48)

Time in Permanent Housing	Navy		Air Force		Marine Corps Accompanied		Total	
	n	%	n	%	n	%	n	%
1 to 6 months	317	21.9	228	26.2	179	10.9	724	18.3
7 to 12 months	350	24.1	242	27.8	435	26.5	1027	25.9
13 to 24 months	448	30.9	242	27.8	550	33.5	1240	31.3
25 months or longer	335	23.1	159	18.3	477	29.1	971	24.5
Total	1450	100.0	871	100.1	1641	100.0	3962	100.0

The highest percentage in all three Services had lived in their residences for less than one year. Air Force members had been living in their permanent residences for the longest period and the Marine Corps personnel (accompanied) for the shortest period of time.

### Housing Type and Preference

Housing type refers to the ownership of the service member's residence (U.S. government-owned/managed, government-leased, economy, or other). Government-owned housing is usually on the post, base, or duty station; government-leased is generally foreign built and located off the installation in the economy.

Table J-12 shows the distribution of current housing types as well as the preferred housing types by Service and pay grade group. Because less than 6 percent of each Service sample was living in government-leased or other types of housing (except the E-1 to E-3 groups), these categories were omitted from the table in order to simplify presentation of the data.

Table J-12  
Current and Preferred Housing Types by Service  
and Pay Grade Group (Q44-Q45)

Service/Pay Grade Group	n	Responses (%)			
		Government-Owned		Economy	
		Current	Preferred	Current	Preferred
<u>Navy</u>					
E-1 to E-3	74	16.2	52.7	67.6	35.1
E-4 to E-6	370	63.6	74.6	31.0	19.7
E-7 to E-9	401	77.1	77.1	20.9	20.0
W-2 to W-4	50	80.0	84.0	18.0	14.0
O-1 to O-3	260	73.9	80.4	24.9	15.4
O-4 to O-6	293	78.8	84.6	18.8	12.7
Total	1448	70.4	77.5	26.0	18.2
<u>Air Force</u>					
E-1 to E-3	226	32.2	78.3	55.9	15.9
E-4 to E-6	472	82.7	85.2	14.6	12.1
E-7 to E-9	450	90.2	87.3	8.6	11.1
O-1 to O-3	280	87.1	91.4	11.8	6.8
O-4 to O-6	211	93.4	92.9	6.6	6.2
Total	1639	79.9	86.9	17.2	10.7
<u>Marine Corps</u>					
E-1 to E-3	49	34.0	59.2	46.0	22.4
E-4 to E-6	232	54.1	73.3	37.3	20.3
E-7 to E-9	194	64.6	71.3	30.8	23.2
W-1 to W-4	71	55.7	81.7	41.4	15.5
O-1 to O-3	193	46.9	77.2	49.5	19.7
O-4 to O-6	132	62.9	83.3	35.6	14.4
Total	871	55.1	75.2	39.1	19.6

The majority lived in government-owned housing, ranging from 79.9 percent of the Air Force sample to 55.1 percent of the Marine Corps sample. Almost 40 percent of the Marine Corps personnel lived in economy housing compared to less than 20 percent of the Air Force sample. The differences were most likely a function of the availability of adequate government-owned family housing in the locations where the Services had their largest concentrations.

Examination of type of housing as a function of pay grade group showed that for the Navy and Air Force, a large majority of all groups with the exception of the E-1 to E-3 group lived in government-owned housing. Although junior enlisted service members with dependents are generally not eligible for government housing, there are exceptions (e.g., depending upon space available) that account for the percentage of the E-1 to E-3 group living there.

Majority preference for government-owned housing was found in all pay grades, across Services. With the exception of E-1 to E-3 respondents in the Navy and Marine Corps, this preference was reported as 71 to 93 percent by all other groups. Less than 20 percent of the respondents overall preferred economy housing.

Disparity between current and preferred housing was the highest among E-1 to E-3 service members in the Navy and Air Force. In the Marine Corps, approximately 20 to 30 percent of all pay grades (except the E-7 to E-9 respondents) were not living in their preferred housing, which was primarily government-owned.

The data above imply that of the three Services in Japan/Okinawa, the Marine Corps service members are generally the least likely to be housed as they would like to be. In contrast, it was primarily only junior enlisted personnel in the Navy and Air Force who were not living in the housing they preferred.

#### Housing Styles (Q44, Q46)

Table J-13 shows the distribution of respondents' housing styles by pay grade group and service. As those who lived in barracks or dorms (mainly unaccompanied Marine Corps personnel) were not included, the percentages do not sum to 100 percent.

A larger proportion of the Marine Corps members (48.9%) lived in single family housing than did the Navy (30%) or Air Force (30.5%) samples. The other major difference was the percentage living in townhouses and rowhouses: 17.2 percent of the Marine Corps members versus 36.9 percent for the Navy and 31.4 percent for the Air Force. A higher percentage of all pay grade groups in the Marine Corps, with the exception of the E-1 to E-3 group, lived in single family housing than did their counterparts in the other two Services.

In the Navy sample, government-owned housing was most frequently town/rowhouse style (49.2%), with single family and duplex styles accounting for most of the rest. Government-leased housing was most frequently single family (33.3%) followed by town/rowhouses (27.8%) and apartments with elevators (22.2%). Economy housing was largely single family (66.5%) or walk-up apartments (18.8%).

In the Air Force sample, government-owned housing was distributed approximately equally across the single family, duplex, and town/rowhouse styles, with a small percentage (11.6%) apartments with elevators. The most common type of government-leased housing was duplex style (41.2%), followed by single family units (23.5%), town/rowhouses (17.6%) and apartments (17.7%), most of which were walk-ups. Economy housing was largely either single family (62.1%) or walk-up apartments (26.9%).

In the Marine Corps sample, nearly half of the government-owned housing was single family (49.3%) and the remainder either duplex or town/rowhouse styles. Government-leased housing was 42.9 percent single family, 35.7 percent town/rowhouses, and 21.4 percent duplexes. Economy housing was largely either single family (49.1%) or walk-up apartments (41.8%). Apartment houses with elevators were very uncommon.

#### Commuting Distances to Installation (Q52)/Community Types (Q54)

Among respondents living off the base, post, or duty station, the average commuting distances from their residences to the installation ranged from 3.8 miles for the Air Force to 6.9 miles for the Navy. There were no large differences among pay grade groups in distances from the residence to the installation.

### Housing Styles by Service and Pay Grade Group (Q46)

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The question on community type was asked only of those living in economy or government-leased housing. Differences among the three Services showed about 75 percent of the Navy respondents living in communities with few or no other Americans, while the Air Force sample showed only 28 percent in such communities. Slightly more than half of the Air Force respondents lived in communities with an equal mix of Americans and host country citizens, while 37 percent of the Marine Corps sample lived in this type of community. Between 8 percent (Navy) and 20 percent (Air Force) lived in communities comprised mostly of Americans.

#### Sharing Living Expenses (Q51)/Out-of-pocket Expenses for Housing (Q50)

Very few respondents in any of the Services (between 1.6 and 2.1%) reported sharing living expenses with persons other than their dependents.

The majority (59 to 72%) in all Services reported no out-of-pocket expenses for housing, with the E-1 to E-3 pay grade groups being the most likely to have expenses. Table J-14 shows the distribution of these expenses by Service and pay grade group. The reader is cautioned that the percentages reporting monthly expenses in excess of \$600 probably reflects respondent error when using the answer sheet.

#### Navy

Navy respondents (70.4% living in government-owned housing) reported 64.2 percent with no out-of-pocket expenses per month for housing and 20.9 percent with expenses up to \$400.

#### Air Force

Of the three Services, a greater percentage (72.4%) of the Air Force respondents reported having no monthly out-of-pocket expenses. Fifteen percent reported expenses up to \$400. A large majority (79.9%) of the Air Force respondents lived in government-owned housing.

#### Marine Corps

In the Marine Corps sample, 55 percent were living in government-owned housing. Overall, only 58.9 percent reported no out-of-pocket expenses for housing. Just over one-quarter (27.8%) reported expenses of \$400 or less.

Table J-14

## Out-of-pocket Expenses for Housing Per Month (Q50)

Out-of-pocket Expenses	Responses (%)						Overall Total
	E-1 to E-3	E-4 to E-6	E-7 to E-9	W-1 to W-4	O-1 to O-3	O-4 to O-6	
<b>Navy</b>							
None	26.3	53.6	69.4	74.5	68.0	75.6	64.2
\$10 - 50	8.8	5.4	2.6	0.0	5.6	2.3	4.0
60 - 100	16.3	10.8	5.9	2.0	7.1	3.0	7.2
110 - 150	10.0	3.3	2.4	7.8	3.0	2.3	3.3
160 - 200	3.8	3.8	1.9	2.0	1.5	3.0	2.7
210 - 250	6.3	1.5	1.4	0.0	2.6	0.7	1.7
260 - 300	1.3	2.1	1.2	2.0	1.5	0.7	1.4
310 - 400	0.0	0.8	0.0	0.0	1.5	0.7	0.6
410 - 600	5.0	1.8	2.1	2.0	1.1	1.0	1.8
610 - 1000	21.3	15.4	12.3	7.8	6.8	9.7	11.9
1010 - 1500	0.0	1.0	0.5	2.0	0.0	0.7	0.6
1510+	1.3	0.6	0.2	0.0	1.2	0.3	0.6
<b>Air Force</b>							
None	48.5	72.5	79.0	--	74.6	82.0	72.4
\$10 - 50	13.3	2.8	2.0	--	2.1	0.9	3.7
60 - 100	14.9	5.3	2.8	--	3.8	1.9	5.3
110 - 150	5.0	2.2	1.3	--	2.1	0.0	2.1
160 - 200	2.9	2.0	0.7	--	2.8	1.4	1.8
210 - 250	0.8	0.8	0.7	--	0.7	1.4	0.8
260 - 300	2.5	0.8	0.0	--	1.0	0.5	0.8
310 - 400	0.4	0.0	0.9	--	1.0	0.0	0.5
410 - 600	0.4	0.8	0.9	--	0.7	0.0	0.7
610 - 1000	10.8	12.3	11.4	--	10.5	10.4	11.3
1010 - 1500	0.0	0.4	0.2	--	0.7	0.5	0.4
1510+	0.4	0.0	0.2	--	0.0	1.0	0.3
<b>Marine Corps</b>							
None	30.2	57.1	59.1	62.8	58.4	71.6	58.9
\$10 - 50	5.7	6.1	4.8	3.8	6.4	2.2	5.1
60 - 100	15.1	9.4	6.7	7.7	9.9	5.2	8.5
110 - 150	9.4	4.5	4.8	0.0	3.5	2.2	3.9
160 - 200	11.3	2.4	4.8	2.6	7.4	3.7	4.8
210 - 250	1.9	1.2	2.9	1.3	2.0	2.2	2.0
260 - 300	7.5	2.4	0.5	3.8	1.5	1.5	2.1
310 - 400	1.9	1.2	1.4	0.0	1.0	3.0	1.4
410 - 600	0.0	1.6	0.5	2.6	2.0	2.2	1.5
610 - 1000	17.0	13.1	13.5	14.1	6.9	4.5	10.9
1010 - 1500	0.0	0.4	0.0	0.0	0.5	0.0	0.2
1510+	0.0	0.4	1.0	1.3	0.5	1.5	0.8

## PROCESS OF OBTAINING HOUSING

### Introduction

Most service members live in temporary housing when they first report to their foreign post, base, or duty station prior to moving into permanent housing. The following sections present data concerning objective and subjective aspects of the temporary housing experience.

The questions were directed only to those who had lived in (or currently lived in) temporary lodgings at their present post, base, or duty station. In addition, some of the questions were not relevant to certain groups with experience in temporary housing (e.g., costs and temporary living allowance for those in government facilities, play space for children for those without children, etc.). Therefore, nonresponse was quite high on some items in this section as a result of lack of experience in temporary lodgings and/or the lack of applicability of selected items to certain groups (19 to 48% Navy, 17 to 50 percent Air Force, and 29 percent to 53 percent Marine Corps personnel).

### Temporary Housing (Q43)

Very few of the respondents were living in temporary lodging at the time of the survey--3.4 percent of the Air Force sample to 5.7 percent of the Marine Corps sample.

### Time Unaccompanied before Arrival of Dependents

Table J-15 shows the percentage of service members who reported spending some time unaccompanied before the arrival of their dependents.

Table J-15

Time Unaccompanied Before Arrival of Dependents (Q104)

Weeks Unaccompanied	Navy		Air Force		Marine Corps		Total	
	n	%	n	%	n	%	n	%
None	972	79.3	1127	80.8	476	73.3	2575	78.8
1 to 4 weeks	53	4.3	63	4.5	47	7.2	163	5.0
5 to 8 weeks	62	5.1	80	5.7	29	4.5	171	5.2
9 to 12 weeks	42	3.4	57	4.1	24	3.7	123	3.8
13 weeks or longer	96	7.8	67	4.8	73	11.2	236	7.2
Total	1225	99.9	1394	99.9	649	99.9	3268	100.0

The majority of respondents in all Services traveled concurrently with their dependents. Among those who did wait for dependents, the Air Force sample generally waited a shorter time and the Marine Corps respondents a longer time.

Pay Grade Differences. In all three Services, a higher proportion of the E-1 to E-3 group had to wait for their dependents to arrive than did all other pay grades, between 42.4 percent (Marine Corps) and 54.9 percent (Navy). In contrast, for the other pay grade

groups, only 15 to 26 percent (Navy), 20 to 24 percent (Air Force), and 26 to 32 percent (Marine Corps) waited for their dependents.

### Actual and Preferred Types of Temporary Lodgings

Table J-16 shows for each Service the percentage of each pay grade group by type of temporary lodgings that were occupied by the respondents when they arrived at their present post, base, or duty station; the percentages preferring each type; and the disparity between the actual and preferred type percentages. The disparity column refers to the difference between the percentage who occupied that type of lodging and the percentage who preferred to occupy that type.

Table J-16

#### Type of Temporary Lodgings Occupied and Preferred (Q105-Q106)

Pay Grade Group	Responses (%)				Disparity
	Government-owned/leased		Economy		
	Occupied	Preferred	Occupied	Preferred	
<u>Navy</u>	(n = 1026)	(n = 1077)	(n = 202)	(n = 159)	
E-1 to E-3	86.0	84.0	14.0	16.0	-2.0
E-4 to E-6	79.1	85.0	20.9	15.0	5.9
E-7 to E-9	79.4	86.0	20.6	14.0	6.6
W-2 to W-4	82.5	85.0	17.5	15.0	2.5
O-1 to O-3	85.5	87.5	14.5	12.5	2.0
O-4 to O-6	91.1	91.5	8.1	8.5	-0.4
<u>Air Force</u>	(n = 867)	(n = 1189)	(n = 526)	(n = 201)	
E-1 to E-3	59.2	82.8	40.8	17.2	23.6
E-4 to E-6	55.6	83.3	44.4	16.7	27.7
E-7 to E-9	57.8	83.5	42.2	16.5	25.7
O-1 to O-3	66.8	88.3	33.2	11.7	21.5
O-4 to O-6	82.0	93.1	18.0	6.9	11.1
<u>Marine Corps</u>	(n = 503)	(n = 529)	(n = 140)	(n = 112)	
E-1 to E-3	78.1	84.4	21.9	15.6	6.3
E-4 to E-6	73.7	78.8	26.3	21.2	5.1
E-7 to E-9	71.8	76.8	28.2	23.2	5.0
W-1 to W-4	88.5	90.2	11.5	9.8	1.7
O-1 to O-3	78.3	86.5	21.7	13.5	8.2
O-4 to O-6	90.2	87.0	9.8	13.0	-3.2

Government-owned and government-leased temporary lodgings are combined in the table due to the small numbers who occupied government-leased lodgings. In the Navy sample, 4.7 percent occupied them and 4.5 percent preferred them. In the Air Force



availability of government housing, movement of service members and other factors may serve to make the housing office tasks difficult to perform satisfactorily for many service members.

## SATISFACTION WITH PERMANENT HOUSING, FACILITIES, AND SERVICES

### Satisfaction Levels

In order to measure satisfaction, 33 questions were asked about various characteristics of the individual's present permanent residence, and about several facilities and services (e.g., recreational facilities, child care, public transportation). Included were two questions on overall satisfaction with adequacy and comfort of the residence, one for the service member and the other for the spouse. In this section, descriptive data on satisfaction, as well as characteristics of the individuals, housing, and experiences that were related to satisfaction, are presented. Again, the data shown are for the accompanied respondents.

### Overall Satisfaction

Table J-25 shows overall satisfaction by Service for the service member and the spouse. (It is assumed that the service member answered for the spouse on the second item.)

Table J-25

Satisfaction with Overall Comfort and Adequacy of the Residence (Q88-Q89)

Respondent	n	Responses (%)		
		Dissatisfied	Neutral	Satisfied
<u>Navy</u>				
Service member	1443	22.5	10.3	67.2
Spouse	1424	29.4	8.8	61.8
<u>Air Force</u>				
Service member	1632	23.8	9.3	66.9
Spouse	1599	30.6	9.6	59.8
<u>Marine Corps</u>				
Service member	863	27.9	10.8	61.4
Spouse	854	33.4	10.8	55.8

The majority of service members and their spouses in the three Services were satisfied with their residences. Spouse satisfaction was somewhat less than service member satisfaction in all three Services. Navy and Air Force respondents reported satisfaction for both themselves and their spouses slightly more often than the Marine Corps respondents did.

Table J-24

## Satisfaction with Waiting Time and Assignment and Referral Services (Q40-Q42)

Item	n	Responses (%)		
		Dissatisfied	Neutral	Satisfied
<u>Navy</u>				
Q40: Length of wait for government housing	1368	63.2	10.7	26.1
Q41: Referral services of the housing office	1156	53.6	18.7	27.7
Q42: Assignment services of the housing office	1210	44.5	21.7	33.8
<u>Air Force</u>				
Q40: Length of wait for government housing	1584	52.6	9.0	38.5
Q41: Referral services of the housing office	1263	47.9	23.0	29.1
Q42: Assignment services of the housing office	1383	36.2	23.6	40.2
<u>Marine Corps</u>				
Q40: Length of wait for government housing	709	62.0	9.4	28.5
Q41: Referral services of the housing office	643	56.2	17.7	26.1
Q42: Assignment services of the housing office	649	49.6	18.8	31.6

A majority were dissatisfied with the time they had to wait for government housing. This may reflect housing shortages. There was somewhat less dissatisfaction and more satisfaction in the Air Force sample relative to the other two Services. There was more dissatisfaction than satisfaction with both assignment and referral services in all three Services, with the exception of assignment services in the Air Force.

Pay grade differences were evident in the Navy sample as the 0-4 to 0-6 group members were more dissatisfied and the E-1 to E-3 group more satisfied than the other pay grade groups with referral services. In the Marine Corps sample, the E-1 to E-3 group was more dissatisfied with the wait for government housing and more satisfied with referral services than the other groups. In the Air Force sample, the only discernible difference was the greater dissatisfaction among the E-1 to E-3s with the wait for government housing. This probably reflects assignment policies. Some do get into government housing, but they usually have to wait until those who are eligible and desire such housing are placed.

Dissatisfaction with services of the housing office may not necessarily reflect on the efforts or organization of these offices. The characteristics of the housing market,

Table J-23

## Satisfaction with Aspects of Economy Housing Listings (Q29-Q33)

Listing Aspect	n	Responses (%)		
		Dissatisfied	Neutral	Satisfied
<u>Navy</u>				
Q29: Number of listings	353	63.2	12.5	24.3
Q30: Up-to-date information on listings	348	47.7	18.7	33.7
Q31: Size of housing units	360	52.8	17.2	30.0
Q32: Rental costs	364	45.4	24.2	30.5
Q33: Commuting distances from rentals to installations	368	32.6	20.1	47.3
<u>Air Force</u>				
Q29: Number of listings	274	52.2	20.1	27.7
Q30: Up-to-date information on listings	273	43.9	22.0	34.0
Q31: Size of housing units	279	66.7	10.8	22.6
Q32: Rental costs	278	57.2	18.7	24.1
Q33: Commuting distances from rentals to installations	279	18.0	19.4	62.7
<u>Marine Corps</u>				
Q29: Number of listings	265	61.5	18.5	20.0
Q30: Up-to-date information on listings	268	43.7	26.1	30.2
Q31: Size of housing units	288	58.4	16.3	25.4
Q32: Rental costs	290	39.0	23.4	37.5
Q33: Commuting distances from rentals to installations	293	18.8	18.4	62.8

Of those who did use housing office services in obtaining economy housing, the large majority of the Navy sample saw them as helpful. In the Air Force and Marine Corps samples, two of the services (transportation to inspect rentals and help with utility companies) were used by a larger proportion than reported that the housing office was not helpful. The housing offices were perceived as helpful for the other services and for overall help in finding economy housing. Of those who rated helpfulness, 59 to 65 percent judged the housing office to be somewhat or very helpful in finding economy housing.

As to pay grade differences, the Navy 0-4 to 0-6 respondents judged the housing office as less helpful than did the other pay grade groups on most of the items, especially on overall helpfulness. The E-7 to E-9 and W-2 to W-4 groups were less likely to report using the various services than other pay grades were. In the Air Force sample, responses by pay grade groups were too few to produce any trends. As the analysis was performed only on those living in economy housing, the sample size was decreased considerably. In the Marine Corps sample, the only trends by pay grade showed the E-1 to E-3 group less likely to use the various listed services and the W-1 to W-4 group as more likely than others to report the housing office as not helpful. These results should be interpreted cautiously, though, because the sample sizes in these two pay grade groups were very small.

### Economy Housing Listings

Five items on the questionnaire asked the respondents to indicate their satisfaction with aspects of economy housing listings. Table J-23 shows the distribution of the responses.

Respondents across all three Services were most dissatisfied with the number of listings available and the size of the listed rental units. They were most satisfied with the commuting distances of the available listings to their installation. For all three Services, there was more dissatisfaction than satisfaction with all aspects of economy housing listings with the exception of commute distance. The availability of economy housing, reflected somewhat in dissatisfaction with the number of listings, may affect the satisfaction with other aspects of the listings since there may not be much of a choice. The number of listings may be more a function of market conditions than housing office effort.

Examining pay grade differences in the Navy showed that the E-1 to E-3 group was more satisfied with most of the aspects of economy listings and the 0-4 to 0-6 group was more dissatisfied with the listings than were the other pay grade groups. In the Air Force sample, the 0-1 to 0-3 and E-7 to E-9 groups were more dissatisfied with the number of listings, up-to-date information on the listings and size of the available housing than the other pay grades were. Again, the number of respondents in some of the pay grade groups was small. No trends were observed as a function of pay grade in the Marine Corps sample.

### Satisfaction with Waiting Time for Government Housing and Assignment and Referral Services of the Housing Office

Table J-24 shows the responses to questions about satisfaction with waiting time for government housing and assignment and referral services of the housing office. The table includes all who responded to these questions, regardless of their current type of housing (i.e., government or economy).

Table J-22  
Housing Office Helpfulness (Q34-Q39)

Housing Office Service	n	Responses (%)			
		Not Provided	Did Not Use	Not Helpful	Helpful
<u>Navy</u>					
Q34: Orientation to the local housing market	379	13.2	15.0	22.4	49.3
Q35: Transportation to inspect rentals	378	32.2	17.5	13.1	37.3
Q36: Language interpretation dealing with landlords	378	16.4	26.2	9.8	47.7
Q37: Lease review and/or rental negotiation	378	6.1	13.5	11.1	69.3
Q38: Overall help in finding economy housing	379	4.0	11.3	29.0	55.6
Q39: Help with utility companies	379	19.5	26.9	19.5	34.1
<u>Air Force</u>					
Q34: Orientation to the local housing market	282	15.6	11.0	19.5	53.9
Q35: Transportation to inspect rentals	281	64.1	12.8	15.3	7.8
Q36: Language interpretation dealing with landlords	280	39.3	23.9	12.9	23.9
Q37: Lease review and/or rental negotiation	280	17.1	17.5	12.5	52.9
Q38: Overall help in finding economy housing	281	6.4	8.9	34.9	49.8
Q39: Help with utility companies	281	31.3	22.1	26.7	19.9
<u>Marine Corps</u>					
Q34: Orientation to the local housing market	334	18.0	29.6	13.5	38.9
Q35: Transportation to inspect rentals	335	54.0	29.6	8.7	7.8
Q36: Language interpretation dealing with landlords	332	31.9	37.3	7.8	22.9
Q37: Lease review and/or rental negotiation	332	21.7	34.3	9.9	34.1
Q38: Overall help in finding economy housing	335	11.0	30.1	22.4	36.5
Q39: Help with utility companies	332	28.0	41.0	17.5	13.5

Table J-21  
Sponsor Attitude and Assistance (Q143-Q144)

Item	Responses (%)							
	Navy		Air Force		Marine Corps		Total	
	Enlisted	Officer	Enlisted	Officer	Enlisted	Officer	Enlisted	Officer
Q143: Sponsor Attitude	(n = 653)	(n = 539)	(n = 1001)	(n = 449)	(n = 339)	(n = 295)	(n = 1993)	(n = 1283)
Negative	24.3	23.4	29.1	22.3	25.4	23.1	26.9	22.9
Equally negative and positive	24.0	17.4	23.3	18.7	20.9	18.3	32.1	18.1
Positive	51.7	59.2	47.6	59.0	53.7	58.6	50.0	59.0
Q144: Sponsor Assistance	(n = 747)	(n = 579)	(n = 1124)	(n = 487)	(n = 347)	(n = 297)	(n = 2218)	(n = 1363)
No help needed	16.9	10.4	9.5	10.7	19.0	8.8	13.4	7.8
Sponsor unavailable	11.4	5.0	6.9	8.0	6.9	5.1	8.4	5.6
Not helpful	15.1	16.9	15.8	35.5	12.1	16.8	15.0	13.7
Helpful	56.6	67.7	67.8	45.8	62.0	69.3	63.2	72.9

groups showed a small, but higher, percentage than did officers reporting not having sponsors. In the Marine Corps sample, the relationship to pay grade group was not consistent. The E-1 to E-6 and O-1 to O-3 groups showed the highest percent without sponsors (from 25% of the E-1 to E-3s to 32.7% for the E-4 to E-6s).

Table J-21 shows the distribution of responses by enlisted/officer on the two items regarding sponsors.

Among those with sponsors, sponsor attitude was related to the perceived effect of the temporary housing experience on choice of permanent housing and on attitude toward living overseas. In all three Services, individuals who reported positive sponsor attitudes were less likely to say their temporary housing experience caused them to make a less than satisfactory choice of permanent housing compared to those with sponsors who had negative attitudes. The same results were found for the effect of the temporary lodging experience on attitude toward living overseas. Those who reported positive sponsor attitudes were also less likely to say their attitude was worsened by their temporary lodging experience. Across all three Services, sponsor helpfulness was not as clearly or consistently related to perceived effects of the temporary housing experience as was sponsor attitude.

#### Housing Office Services/Satisfaction with Services and Helpfulness

Three sets of questionnaire item responses are reported in this section. The first two represent the opinions and experiences of those respondents living in economy housing only, because these questions pertain only to those who had experience with housing office services in finding economy housing. The third set includes all respondents, regardless of their housing type, because it deals with more general questions about housing.

##### Housing Office Helpfulness

Table J-22 shows the responses to six items dealing with helpfulness of the housing office in providing services to personnel seeking economy housing.

Of those living in economy housing, the Air Force and Marine Corps respondents reported nonavailability of housing office services to a greater degree than those in the Navy. In all three Services, transportation to inspect possible rentals was reported most frequently as not provided, ranging from 34 percent for the Navy to 64 percent for the Air Force. Other services often reported as not provided were help with utility companies and language interpretation in dealing with landlords. In the Marine Corps sample, approximately 30 to 40 percent of those responding did not use the various housing office services listed. The lack of use was less in the other two Services. In the Marine Corps sample, 48 to 84 percent of the service members either did not use or were not provided with the various services listed. In the Air Force sample, transportation to inspect rentals, language interpretation, and help with utility companies were not provided or not used by over 50 percent of the individuals. The data do not allow an interpretation of the reasons for nonuse of services. For example, it cannot be determined whether nonuse was based on perceptions of deficiencies in the service provided by the housing office or a lack of need for the service.

in the 04 to 06 group were more likely to say the experience had no effect. In the other samples, the Air Force E-1 to E-6 groups and the Marine Corps E-7 to E-9 group were more likely than others to say the temporary housing experience led to a less than satisfactory choice of permanent housing. The E-1 to E-6 and 0-1 to 0-3 Air Force respondents were somewhat more likely to report a worsened attitude toward living overseas resulting from their temporary housing experience, while the E-7 to E-9 and 0-4 to 0-6 respondents more often reported no attitude effects.

#### Effects of the Type of Temporary Lodgings

Table J-20 illustrates the differences in perceived negative effects as a function of the last type of temporary lodgings occupied.

Table J-20

#### Effects of the Type of the Last Temporary Lodgings Occupied (Q109-Q111)

Type of Temporary Lodgings	Navy	Air Force	Marine Corps
Percent Reporting a Less than Satisfactory Choice of Permanent Housing			
Government-owned/leased	26.5	26.6	31.9
Economy	33.2	41.1	33.5
Percent Reporting a "Worsened" Attitude Toward Living Overseas			
Government-owned/leased	16.8	16.9	14.7
Economy	21.4	26.9	23.7

Negative effects of temporary lodgings were greater on choice of permanent housing than on attitude toward living overseas in all Services and for both types of housing. Differences between government and economy temporary lodgings show more reporting of negative effects among those who lived in economy housing. This relationship was strongest in the Air Force sample. The perception of greater negative effects on choice of permanent housing than on attitude toward living overseas held for most pay grades in each of the Services.

#### Sponsor Program (Q143-Q144)

Respondents were asked two questions about their sponsors. One dealt with sponsor attitude toward living conditions at the foreign location; and the second, with the helpfulness of the sponsor with the respondent's family adjustment.

Some respondents reported not having sponsors: 12.3 percent of the Navy, 4.9 percent of the Air Force, and 24.1 percent of the Marine Corps. Not having a sponsor was related to pay grade. In the Navy sample, there was a decline in the percentage not having sponsors as pay grade increased, ranging from 27.5 percent of the E-1 to E-3 group to 4.0 percent of the 0-4 to 0-6 group. Among the Air Force respondents, the enlisted



Table J-19 (Continued)

Service/Pay Grade Group	n	Responses (%)		
On the Respondent's Attitude (Q111)				
		<u>Worsened</u>	<u>No Effects</u>	<u>Improved</u>
<u>Navy</u>				
E-1 to E-3	50	18.0	70.0	12.0
E-4 to E-6	300	19.7	71.0	9.3
E-7 to E-9	350	12.0	80.3	7.7
W-2 to W-4	40	10.0	85.0	5.0
O-1 to O-3	223	25.1	67.3	7.6
O-4 to O-6	269	20.4	72.1	7.4
Total	1232	18.3	73.6	8.1
<u>Air Force</u>				
E-1 to E-3	155	25.8	69.0	5.2
E-4 to E-6	383	25.1	68.9	6.0
E-7 to E-9	414	14.3	78.7	7.0
O-1 to O-3	248	25.4	63.7	10.9
O-4 to O-6	189	19.6	75.1	5.3
Total	1389	21.2	71.8	7.0
<u>Marine Corps</u>				
E-1 to E-3	30	23.3	63.3	13.3
E-4 to E-6	151	19.9	74.2	6.0
E-7 to E-9	164	18.3	73.2	8.5
W-1 to W-4	60	10.0	80.0	10.0
O-1 to O-3	142	18.3	73.9	7.7
O-4 to O-6	90	17.8	78.9	3.3
Total	637	18.1	74.6	7.4
<u>Total</u>				
E-1 to E-3	235	23.8	68.5	7.7
E-4 to E-6	834	22.2	70.6	7.2
E-7 to E-9	928	14.1	78.3	7.5
W-1 to W-4	100	10.0	82.0	8.0
O-1 to O-3	613	23.7	67.4	9.0
O-4 to O-6	548	19.7	74.3	6.0
Total	3258	19.5	73.0	7.5

Table J-19  
Effects of the Temporary Lodging Experience

Service/Pay Grade Group	n	Responses (%)		
On Permanent Housing Choice (Q110)				
		<u>Less than Satisfactory</u>	<u>No Effect</u>	<u>Satisfactory Choice</u>
<u>Navy</u>				
E-1 to E-3	50	24.0	42.0	34.0
E-4 to E-6	299	29.8	44.1	26.1
E-7 to E-9	348	34.2	45.4	20.4
W-2 to W-4	40	32.5	45.0	22.5
O-1 to O-3	222	29.7	53.6	16.7
O-4 to O-6	270	18.5	67.8	13.7
Total	1229	28.4	51.3	20.3
<u>Air Force</u>				
E-1 to E-3	154	44.2	40.3	15.6
E-4 to E-6	381	40.4	39.9	19.7
E-7 to E-9	411	31.4	44.5	24.1
O-1 to O-3	247	26.3	53.8	19.8
O-4 to O-6	189	20.6	66.1	13.2
Total	1382	32.9	47.4	19.7
<u>Marine Corps</u>				
E-1 to E-3	30	30.0	46.7	23.3
E-4 to E-6	150	31.3	43.3	25.3
E-7 to E-9	164	45.7	39.6	14.6
W-1 to W-4	60	23.3	51.7	25.0
O-1 to O-3	142	27.5	54.9	17.6
O-4 to O-6	91	26.4	57.1	16.5
Total	637	32.7	47.9	19.5
<u>Total</u>				
E-1 to E-3	234	38.0	41.5	20.5
E-4 to E-6	830	34.9	42.0	23.0
E-7 to E-9	923	35.0	44.0	21.0
W-1 to W-4	100	27.0	49.0	24.0
O-1 to O-3	611	27.8	54.0	18.2
O-4 to O-6	550	20.5	65.5	14.0
Total	3248	31.2	49.0	19.9

with the overall comfort and adequacy. In contrast, over 50 percent who lived in economy lodgings expressed dissatisfaction with the overall comfort and adequacy.

The aspects of temporary lodgings that showed the largest differences in percent dissatisfied between those in government and economy quarters were size of quarters, convenience of the lodgings to the installation, convenience of the lodgings to government facilities, and cost. In the Navy sample, there was also greater dissatisfaction among those living in economy lodgings with kitchen, eating, and cooking and laundry facilities than was found among occupants of government lodgings.

Grouping the Satisfaction Items. A statistical procedure designed to develop meaningful groupings of individual items (factor analysis) was applied to the 11 satisfaction items. The results were two groups of items (factors) that accounted for a large amount of the interrelationships among the 11 satisfaction items in each of the Services. The first group comprised 9 of the 11 items including overall satisfaction, which was a major component of this group. This grouping can be interpreted as a general feeling of satisfaction/dissatisfaction that permeates responses to most of the individual items whether they deal with privacy, kitchen facilities, size, etc. The other group (factor) was comprised of the two convenience items: convenience of the temporary lodgings to the installation and to government facilities.

Predicting Overall Satisfaction. Another statistical method, multiple regression, was employed to determine what best predicts overall satisfaction with the comfort and adequacy of one's temporary residence. In addition to the 10 individual satisfaction questions, selected other variables (children/no children, number of live-in dependents, pay grade group, type of temporary housing, perceived effects of temporary housing on choice of permanent housing and attitude toward living overseas, and time spent in temporary housing) were used. The analysis showed that satisfaction with size of the temporary lodgings was the most powerful predictor of overall satisfaction (correlation = .71). Satisfaction with cleanliness, costs, and privacy also contributed to the prediction of overall satisfaction. Most of the other variables used were entered into the prediction equation but contributed very little to the prediction. These four variables, taken together, showed a very high correlation with overall satisfaction (.83). In summary, the major component of overall satisfaction with temporary housing was satisfaction with size of the quarters.

#### Effects of the Temporary Lodging Experience

Respondents were asked the effects of their experience in temporary lodgings on their permanent housing choice and attitude toward living in a foreign location. Table J-19 presents these data by pay grade group. It clearly shows that individuals in all three Services perceived the temporary housing experience to have more of an effect on their choice of permanent housing than on their attitudes toward living in a foreign location. Approximately 50 percent of the respondents perceived an effect on choice of permanent housing, with a consistently larger percentage saying the experience led them to make a less than satisfactory choice. Attitudes toward living overseas were not affected by the temporary housing experience for over 70 percent in each of the three Service. Of the 26 to 28 percent who reported an effect, the large majority said the experience worsened their attitude.

Pay grade differences were minor. In the Navy sample, the service members in the E-1 to E-3 group were slightly more likely than other pay grades to say that their experience led to a satisfactory choice of permanent housing, while the service members

Table J-18  
Satisfaction with Aspects of Temporary Lodgings

Aspect	Responses (%)					
	Government-owned/leased		Economy		Total	
	Dissat.	Sat.	Dissat.	Sat.	Dissat.	Sat.
<u>Navy</u>						
Q112: Personal safety/security	14.5	65.3	19.9	63.9	16.1	64.9
Q113: Privacy	39.1	45.8	35.3	51.7	38.0	47.7
Q114: Kitchen, eating and cooking facilities	51.8	33.7	62.9	29.3	55.6	32.3
Q115: Laundry facilities	40.4	43.6	61.2	28.9	46.0	39.8
Q116: Cleanliness	22.1	64.9	27.9	56.9	23.8	62.7
Q117: Play space for children	43.9	41.1	56.9	33.5	47.2	39.0
Q118: Size of quarters	45.2	40.5	58.2	29.4	49.1	37.3
Q119: Convenience of lodging to the installation	14.8	75.9	34.1	50.0	20.8	68.0
Q120: Convenience of lodging to government facilities	15.1	76.0	35.3	49.3	21.3	67.9
Q121: Overall comfort and adequacy	33.0	52.1	51.0	35.5	38.3	47.2
Q122: Cost	24.3	55.2	50.6	30.2	32.4	47.4
<u>Air Force</u>						
Q112: Personal safety/security	22.3	58.6	28.1	49.7	24.8	54.5
Q113: Privacy	48.1	36.9	43.4	42.9	46.0	39.5
Q114: Kitchen, eating and cooking facilities	49.4	35.7	60.3	28.4	53.9	32.7
Q115: Laundry facilities	44.2	39.8	57.6	28.8	49.4	35.5
Q116: Cleanliness	27.6	56.5	37.5	47.5	31.9	52.5
Q117: Play space for children	55.1	31.0	67.9	21.6	60.4	27.1
Q118: Size of quarters	50.2	36.5	70.6	20.6	59.2	29.4
Q119: Convenience of lodging to the installation	14.8	73.2	28.9	56.0	21.2	65.5
Q120: Convenience of lodging to government facilities	16.2	71.8	30.4	53.9	22.6	63.8
Q121: Overall comfort and adequacy	38.8	47.2	56.7	29.0	46.7	39.1
Q122: Cost	22.1	60.9	52.8	26.8	36.1	45.3
<u>Marine Corps</u>						
Q112: Personal safety/security	16.4	66.8	23.0	56.2	19.1	62.6
Q113: Privacy	40.9	45.5	38.7	50.7	40.4	47.1
Q114: Kitchen, eating and cooking facilities	55.4	34.4	63.4	27.3	58.5	31.7
Q115: Laundry facilities	46.8	37.8	52.8	36.0	48.9	37.1
Q116: Cleanliness	31.3	57.9	36.2	50.0	33.3	54.8
Q117: Play space for children	43.7	42.0	52.9	36.0	46.8	40.1
Q118: Size of quarters	52.6	35.9	64.7	23.9	56.9	31.5
Q119: Convenience of lodging to the installation	19.1	68.8	31.8	50.5	23.7	62.0
Q120: Convenience of lodging to government facilities	18.2	68.5	33.0	50.2	23.7	61.7
Q121: Overall comfort and adequacy	38.6	48.4	55.3	33.6	44.9	42.9
Q122: Cost	18.0	62.8	46.5	34.1	28.6	52.3

Table J-17

Features Most Reported as Not Available

Feature	Responses (%)					
	Navy		Air Force		Marine Corps	
	Government	Economy	Government	Economy	Government	Economy
Q114: Kitchen, eating and cooking facilities	2.5	15.8	14.4	25.3	9.2	13.3
Q115: Laundry facilities	4.6	18.5	4.4	23.6	3.6	23.3
Q117: Play space for children	5.2	18.7	10.6	24.3	4.5	21.8

sample, 2.4 percent occupied them and they were preferred by 4.5 percent. In the Marine Corps sample, 5.0 percent reported occupying government-leased lodgings while 5.5 percent reported preferring them.

The majority of all temporary lodging was government-owned. In the Air Force sample, a lower percent went into government-owned housing and a higher percent into economy housing compared to the other two Services. This is probably a function of availability of government lodgings. Preference for government versus economy lodgings was uniformly high, across all Services and pay grades (77 to 93%), with preference for economy lodgings ranging from just 7 to 23 percent.

#### Days in Temporary Lodgings (Q107/Time Drawing Temporary Living Allowance (Q108))

Among those who reported time spent in temporary lodgings, almost all (89.8% Marine Corps to 95.4% Air Force) were in them for 90 days or less. The largest percentage in each Service (41.6% Marine Corps to 56.2% Air Force) spent 30 days or less. Overall, Air Force service members spent less time in temporary lodging than did those in the Navy and Marine Corps. Pay grade group analysis did not show strong or consistent relationships between pay grade and the length of time in temporary lodgings.

Number of days drawing temporary living allowance (TLA) generally parallel the number of days in temporary lodging.

#### Opinions about Temporary Lodgings

##### Satisfaction with Aspects of Temporary Lodging

Respondents were asked to express their degree of satisfaction with aspects of their last temporary residence during their current tour. For the majority of respondents in all three Services, this last (most recent) temporary residence was government-owned lodging (54 to 65%).

Features Most Often Reported as not Available. Certain kinds of typical housing characteristics or features were reported to be not available in the temporary lodgings. The percentages who reported features unavailable are shown in Table J-17 by Service and type of lodgings.

Temporary lodgings in the economy more often did not have these typical housing features than the government lodgings. However, government lodgings were also reported to be occasionally deficient in kitchen facilities (Air Force and Marine Corps) and in play space for children (Air Force).

Satisfaction Levels. Table J-18 shows the distribution of satisfaction/dissatisfaction responses to the 10 aspects of the last temporary residence, as well as with the overall comfort and adequacy of that residence. The very and somewhat satisfied or dissatisfied categories were combined. Omitted from the table for the purpose of simplification were the neither dissatisfied nor satisfied and the not available responses.

Differences were evident between respondents who had lived in government versus economy temporary lodgings. In general, there was greater satisfaction and less dissatisfaction among those living in government owned/leased lodgings. Nearly 50 percent who lived in government lodgings in each of the Services expressed satisfaction

### Overall Satisfaction by Pay Grade Group, Housing Type, and Household Composition

Table J-26 presents overall satisfaction for service members and spouses by pay grade group.

In the Navy sample, satisfaction was expressed by majorities in all pay grade groups, ranging from 63 percent for the E-7 to E-9 group to 73 percent for the O-1 to O-3 group. In the Marine Corps sample, again, the majority expressed satisfaction, ranging from 56.5 percent of the E-1 to E-3 group to 72.5 percent of the W-1 to W-4 group. In both the Navy and Marine Corps samples, no significant linear patterns or direct relationships were found between satisfaction and pay grade level. The Air Force sample showed the E-1 to E-3 group much lower on satisfaction than all other pay grade groups. The Air Force E-1 to E-3 group was the only pay grade group in all three Services to show less than 50 percent satisfied, and the percentage who reported dissatisfaction was also the highest among all pay grade groups in all three Services.

For all three Services, there was little difference in overall satisfaction between those who did and those who did not have children living with them. This held true for both service member and spouse satisfaction.

Type of housing was categorized as government-owned and economy for the purpose of simplifying Table 27. Since less than 3 percent in all Services and pay grade groups lived in government-leased housing and less than 6 percent lived in "other" housing (with exception of the E-1 to E-3 groups), these categories were eliminated. Table J-27 shows the relationship between type of housing and overall satisfactions.

In all three Services and for both service members and spouses, satisfaction was higher for those in government-owned housing. The difference was greatest in the Air Force where the proportion of dissatisfied respondents among economy residents was over 30 percentage points higher than among government-owned housing residents. There were also substantial differences among the Marine Corps respondents. Twice as high a percentage were dissatisfied among those who lived in economy housing than among government-owned housing residents. In the Navy sample, a similar but smaller difference was found.

Between 71 and 74 percent of the service members who lived in government-owned housing reported overall satisfaction. Comparable figures for those living in economy housing ranged from just 36 to 56 percent. Conversely, the percentages of service members who reported dissatisfaction for the three Services ranged from about 18 to 20 percent for those in government-owned housing, while the figures ranged from 28.5 to 49 percent among those living in economy housing. Type of housing appears to be a powerful influence on overall satisfaction with adequacy and comfort of one's residence.

### Prediction of Overall Satisfaction

In order to predict overall satisfaction with the comfort and adequacy of service members' residences, multiple regression analyses were performed on each Service sample and, within Service, separately for both those living in government-owned housing and those in economy or other housing. Included as predictor variables were all the items dealing with satisfaction with permanent housing, services, and facilities (except spouse overall satisfaction); pay grade group; whether or not the service member had children living with him/her; number of live-in dependents; and effects of the temporary housing experience.

Table J-26

Overall Satisfaction with Adequacy and Comfort of Residence by Service  
and Pay Grade Group For Service Member and Spouse (Q88-Q89)

Service/Pay Grade Group	Service Member (%)			Spouse (%)				
	n	Dissatisfied	Neutral	Satisfied	n	Dissatisfied	Neutral	Satisfied
<u>Navy</u>								
E-1 to E-3	74	18.9	10.8	70.2	73	28.7	11.0	60.2
E-4 to E-6	367	22.3	10.9	66.8	357	29.7	6.7	63.6
E-7 to E-9	401	26.0	11.0	63.1	398	33.5	10.1	56.5
W-1 to W-4	50	24.0	6.0	70.0	50	26.0	8.0	66.0
O-1 to O-3	259	17.8	9.3	72.9	258	25.2	7.4	67.5
O-4 to O-6	292	22.9	9.9	67.1	288	27.8	10.8	61.4
<u>Air Force</u>								
E-1 to E-3	226	40.7	15.0	44.2	223	53.9	11.7	34.5
E-4 to E-6	467	23.1	12.0	64.9	452	30.3	11.3	58.3
E-7 to E-9	448	18.3	6.5	75.2	440	23.2	8.2	68.7
O-1 to O-3	280	17.1	6.1	76.7	275	22.9	5.8	71.3
O-4 to O-6	211	28.0	7.1	64.9	209	32.1	11.5	56.5
<u>Marine Corps</u>								
E-1 to E-3	46	23.9	19.6	56.5	44	40.9	9.1	50.0
E-4 to E-6	233	27.9	12.0	60.0	231	32.9	11.7	55.4
E-7 to E-9	191	29.3	9.9	60.7	188	34.0	9.6	56.4
W-1 to W-4	69	24.6	2.9	72.5	69	27.5	7.2	65.2
O-1 to O-3	280	26.4	10.4	63.2	192	29.7	12.5	57.8
O-4 to O-6	131	30.6	11.5	58.0	130	39.2	10.8	50.0



Table J-27

Overall Satisfaction with Adequacy and Comfort of Residence by  
Type of Housing for Service Member and Spouse

Service/ Housing Type	Service Member (%)			Spouse (%)				
	n	Dissatisfied	Neutral	Satisfied	n	Dissatisfied	Neutral	Satisfied
<u>Navy</u>								
Government-owned	1017	20.0	9.0	71.0	1004	25.6	8.5	65.9
Economy	376	29.8	14.1	56.1	370	39.7	10.5	49.7
<u>Air Force</u>								
Government-owned	1306	17.6	8.2	74.2	1282	23.7	9.3	67.0
Economy	279	51.3	12.5	36.2	272	60.7	9.9	29.4
<u>Marine Corps</u>								
Government-owned	478	19.7	9.4	70.9	476	25.2	10.3	64.5
Economy	336	39.3	11.9	48.8	331	44.1	11.5	44.4

Multiple regression analysis assesses the contribution of each variable in predicting the criterion (service member overall satisfaction) with the effects of the other variables taken into account. Tables J-28, J-29, and J-30 present, in order of their predictive value, the individual variables that, in combination with the other listed variables, best predicted overall service member satisfaction. The R at the bottom of each table is the multiple regression coefficient for each service. This is an indicator of the degree of predictability of the criterion (overall satisfaction) from the combination of the variables shown. The coefficients (Rs) show that responses to the overall satisfaction item are well predicted by the best combinations of the variables, since 1.00 is the maximum R possible.

Table J-28

Variables Contributing Most to Prediction (Description) of  
Overall Satisfaction with the Residence: Navy

Respondents Living in Government- owned housing	Respondents Living in Economy or Other Housing
Satisfaction with residence size	Satisfaction with residence size
Satisfaction with maintenance and repair services	Satisfaction with utility costs
Satisfaction with external appearance of residence	Satisfaction with overall comfort and ade- quacy of temporary residence
Satisfaction with personal safety and security	Satisfaction with personal safety and security
Satisfaction with hot water supply	Satisfaction with access to public transpor- tation
	Effect of temporary housing on attitude toward living overseas
	Number of live-in dependents
	Children versus no children
	Satisfaction with bedroom sizes
	Satisfaction with operating condition of kitchen appliances
R = .81	R = .87

Table J-29

Variables Contributing Most to Prediction (Description) of  
Overall Satisfaction with the Residence: Air Force

Respondents living in Government- owned housing	Respondents Living in Economy or Other Housing
Satisfaction with residence size	Satisfaction with utility costs
Satisfaction with privacy	Satisfaction with maintenance/repair service
Satisfaction with maintenance and repair service	Satisfaction with appearance of neighborhood
Satisfaction with the number of kitchen appliances furnished	Satisfaction with living/dining room size
Satisfaction with living/dining room size	Satisfaction with convenience to playgrounds
	Satisfaction with operating condition of kitch- en appliances
	Number of live-in dependents
	Satisfaction with convenience to youth activ- ity centers
	Satisfaction with hot water supply
	Satisfaction with convenience to the instal- lation
	Children versus no children
R = .81	R = .90

Table J-30

Variables Contributing Most to Prediction (Description) of  
Overall Satisfaction with the Residence: Marine Corps

Respondents living in Government- owned housing	Respondents Living in Economy or Other Housing
Satisfaction with residence size	Satisfaction with residence size
Satisfaction with housing costs	Satisfaction with appearance of neighborhood
Satisfaction with convenience to dispensary/clinic	Satisfaction with hot water supply
Satisfaction with external appearance of residence	Satisfaction with convenience to installation
Satisfaction with water purity	Effect of temporary housing on selection of permanent housing
Pay grade group	Satisfaction with convenience to major medical facilities
	Satisfaction with bedroom size(s)
	Satisfaction with utility costs
	Satisfaction with convenience to the instal- lation
R = .82	R = .91

Tables J-28, J-29, and J-30 show that, for all groups except the Air Force sample living off the installation (i.e., in government-leased, economy, or other housing), satisfaction with the size of the residence was the most powerful predictor of overall satisfaction. This means that those who were less satisfied with the size of their residences showed less overall satisfaction, and vice versa. Overall satisfaction, therefore, is largely a function of satisfaction with the size of the residence.

There were several differences in the variables included in the overall satisfaction prediction sets for service members living in government-owned and off-installation housing. Satisfaction with utility costs was among the most influential variables in all three Services for those living off the installation and was the most powerful predictor for the Air Force subsample. For the Marine Corps personnel in government-owned housing, satisfaction with housing costs was the second most powerful predictor of overall satisfaction. Other differences between those in government-owned versus other types of housing were the inclusion in the set of satisfaction prediction variables of convenience and accessibility for those living in the economy (Marine Corps and Air Force samples); the influence among Navy and Marine Corps respondents living in the economy of the effects of the temporary housing experience and the influence of the number of live-in dependents and children versus no children for those Navy and Air Force respondents living in the economy.

#### Satisfaction with Aspects of Housing, Facilities, and Services

Grouping the Satisfaction Items. Factor analysis is a statistical method that produces groups of items that relate highly to each other. Factor analysis was used to look at the various dimensions involved in the concept of satisfaction. The analysis determines the number and types of groupings that are involved in satisfaction as measured by the 33 items that were included.

The results showed a great deal of consistency across Services. In general, five groupings of items (factors) were found for all three Services, as shown in Table J-31.

The overall satisfaction items (both service member and spouse) were part of both the structural aspects and the immediate physical-psychological surroundings groupings. It appears that five distinct groupings (with some overlap of individual items) of satisfaction are present in the data. Satisfaction is, therefore, multidimensional and involves satisfaction with structural aspects of the residence, operating systems, location, recreation facilities for children, and the immediate physical-psychological surroundings of the residence (e.g., security, privacy, and appearance).

Navy Responses to Satisfaction Items. Thirty-one items asked respondents to rate their satisfaction with specific aspects of their residences, facilities, and services. The following set of tables shows the distribution of responses to these items, arranged in descending order of the percentage dissatisfied.

Table J-32 presents the data for items that were applicable to most respondents (less than 10% reporting not applicable). Table J-33 presents data for items that were not applicable to 10 percent or more of the respondents. These latter items applied mainly to respondents living in economy housing and/or having dependent children living with them. Separating the two sets of items puts the percentages satisfied and dissatisfied into a more realistic perspective than if the not applicables were eliminated in computing the percentages.

Table J-31  
Groupings of Satisfaction Items (Q57-Q89)

Groupings (Items)
<b>STRUCTURAL ASPECTS OF THE RESIDENCE</b> (Including satisfaction with residence size, number of rooms, and overall satisfaction with the comfort and adequacy of the residence).
<b>SYSTEMS/MAINTENANCE/COSTS</b> (Including satisfaction with kitchen, laundry, hot water, heating, and electrical systems, repair and maintenance, and utility and housing costs).
<b>LOCATION/CONVENIENCE</b> (Including satisfaction with convenience of residence to installation and government facilities, dispensary and major medical facilities, availability of child care, busing time for children transported to school, and accessibility of the residence to public transportation).
<b>RECREATIONAL FACILITIES FOR CHILDREN</b> (Including satisfaction with availability, number, and convenience to recreational facilities for children and teenagers).
<b>IMMEDIATE PHYSICAL-PSYCHOLOGICAL SURROUNDINGS</b> (Including satisfaction with external appearance of residence, appearance of neighborhood, personal security, privacy, repair and maintenance services, and overall satisfaction).

In the Navy sample, the majority of the respondents were satisfied with most of the aspects listed in Table J-32. No aspect measured showed more service members who were dissatisfied than satisfied. People were most dissatisfied with heating systems and the size of their residences (including bedroom and living/dining room sizes) as well as convenience to major medical facilities and the adequacy of laundry facilities.

Table J-32

Satisfaction with 22 Aspects of Housing, Facilities,  
and Services (Q57-Q87): Navy

Housing/Facility/Service Aspect	Responses (%)			
	N/A	Dissatisfied	Neutral	Satisfied
Q69: Heating system adequacy	0.7	46.3	5.7	47.3
Q58: Bedroom size(s)	0.0	41.7	8.9	49.4
Q59: Living/dining room size	0.1	40.0	10.9	49.0
Q57: Overall size of residence	0.2	36.1	6.9	56.8
Q84: Convenience of residence to major medical facilities	1.4	34.3	10.2	54.1
Q64: Laundry facility adequacy	5.3	31.9	14.4	48.4
Q61: Number of bathrooms	0.1	28.3	10.6	61.0
Q74: Degree of privacy	0.1	25.7	11.6	62.6
Q60: Number of bedrooms	0.1	23.7	10.9	65.3
Q75: External appearance of residence	0.2	22.1	15.8	61.9
Q63: Number of kitchen appliances furnished	2.6	20.3	13.0	64.2
Q76: Neighborhood appearance	0.3	19.0	15.7	65.0
Q72: Maintenance/repair services on residence	8.5	18.9	16.4	56.2
Q68: Hot water supply	0.1	18.8	7.1	73.9
Q81: Convenience of residence to installation	3.2	18.2	9.2	69.4
Q62: Operating condition of kitchen appliances	1.0	18.1	11.4	69.5
Q83: Convenience of residence to dispensary/clinic	0.8	18.0	9.1	72.1
Q66: Adequacy of electric service	0.2	15.0	13.0	71.8
Q67: Water purity	0.4	14.8	11.5	73.3
Q82: Convenience of residence to government facilities	0.9	14.8	7.8	76.5
Q87: Accessibility to public transportation	4.1	14.0	17.0	64.9
Q73: Personal safety/security	0.4	10.6	10.9	78.1

Of the items that were not applicable to 10 percent or more (Table J-33), the ones that evoked the most dissatisfaction were the number/availability of recreational facilities for children and the availability/quality of government furniture. Even for these items, the percent satisfied was almost the same or greater than the percent dissatisfied. Many more respondents were satisfied than dissatisfied with many of the items, including costs, convenience, child care, and transportation time for children bused to school.

Table J-33

Satisfaction with Aspects Not Applicable to 10 Percent  
or More of the Respondents (Q57-Q87): Navy

Housing/Facility/Service Aspect	Responses (%)			
	N/A	Dissatisfied	Neutral	Satisfied
Q78: Number/availability of recreation for preteens	26.5	27.3	14.5	31.7
Q65: Availability/quality of government furniture	23.4	26.4	22.7	27.5
Q77: Number/availability of recreation for teens	39.3	24.7	14.0	22.0
Q80: Convenience of residence to youth activity centers	24.3	22.6	17.3	35.9
Q79: Convenience of residence to playgrounds	19.3	18.9	12.3	49.5
Q71: Housing costs	34.4	18.5	15.2	31.8
Q70: Utility costs	40.0	16.9	13.0	30.2
Q85: Availability of child care services/facilities	28.6	16.7	15.6	39.0
Q86: Transportation time for children bused to school	49.7	10.2	14.6	25.6

Pay grade group showed statistical relationships to many items. However, the pattern of relationships was neither clear nor consistent. In general, where pay grade differences existed, enlisted personnel (especially the lower pay grade groups) were somewhat less satisfied than the higher groups. Whether or not the service members had children living with them showed no relationship to most of the satisfaction items. Items relating to children were not rated by most of those who did not have children.

The most powerful differences on the satisfaction items were a function of the type of housing. Very few Navy respondents lived in government-leased housing. Table J-34 shows the percentages of those dissatisfied and satisfied with aspects of their housing, facilities, and services by two of the three major housing types.

Table J-34

Satisfaction with Aspects of Housing, Facilities, and Services (Q57-Q87) by Housing Type (Q44): Navy

Aspect	Responses (%)			
	Government-owned (n = 1019)		Economy (n = 377)	
	Dissat.	Sat.	Dissat.	Sat.
Q57: Overall size of residence	34.3	58.3	42.7	51.5
Q58: Bedroom size(s)	39.5	52.2	48.3	41.4
Q59: Living/dining room size	37.9	52.5	46.7	39.0
Q60: Number of bedrooms	22.3	67.3	27.6	59.7
Q61: Number of bathrooms	27.0	64.3	32.4	51.7
Q62: Operating condition of kitchen appliances	14.2	76.0	27.9	53.2
Q63: Number of kitchen appliances furnished	15.2	72.3	33.5	42.6
Q64: Adequacy of the laundry facilities	20.9	59.3	60.1	20.7
Q65: Availability/quality of government furniture <sup>a</sup>	25.0	26.4	29.5	29.5
Q66: Adequacy of electrical service	11.1	76.7	24.7	59.2
Q67: Purity of the water	15.7	73.3	12.7	73.7
Q68: Hot water supply	14.1	80.0	31.8	57.3
Q69: Adequacy of heating system (including insulation)	31.9	61.8	84.8	8.8
Q70: Cost of utilities <sup>a</sup>	2.5	32.1	54.1	24.1
Q71: Cost of housing <sup>a</sup>	9.4	31.9	43.5	30.5
Q72: Maintenance/repair services on residence	17.9	61.7	21.8	41.4
Q73: Personal safety/security	9.8	79.3	11.4	76.4
Q74: Degree of privacy	29.3	59.3	15.6	70.3
Q75: External appearance of the residence	22.3	60.5	21.2	65.8
Q76: Appearance of the neighborhood	20.3	63.7	15.6	68.2
Q77: Number/availability of recreational facilities for teenage children <sup>a</sup>	27.3	26.8	18.6	8.5
Q78: Number/availability of recreational facilities for preteen children <sup>a</sup>	28.2	37.0	26.3	17.0
Q79: Convenience of residence to playgrounds <sup>a</sup>	16.4	58.0	26.3	27.4
Q80: Convenience of residence to youth activity centers <sup>a</sup>	19.2	45.9	32.4	8.0
Q81: Convenience of the residence to the installation	11.9	77.1	33.4	50.9
Q82: Convenience of residence to government facilities	7.5	86.9	33.4	50.1
Q83: Convenience of residence to medical dispensary/clinic	10.8	82.2	35.0	47.2
Q84: Convenience of residence to major medical facilities	29.8	60.7	44.8	37.7
Q85: Availability of child care services and facilities <sup>a</sup>	14.9	45.1	22.0	22.8
Q86: Transportation time for children bused to school <sup>a</sup>	8.1	30.3	16.0	12.6
Q87: Accessibility of public transportation	14.2	64.4	11.7	67.1

<sup>a</sup>Not applicable to 10 percent or more of the respondents.



Those in government-owned housing were more satisfied and less dissatisfied with most of the 31 items than were those in economy housing. These differences permeated all areas of satisfaction. For many items, differences between those in government-owned and economy housing were most noticeable in the extreme category. That is, those in government-owned housing much more often reported being very satisfied.

Air Force Responses to Satisfaction Items. Tables J-35 and J-36 present the Air Force satisfaction data.

Table J-35  
Satisfaction with 23 Aspects of Housing, Facilities,  
and Services (Q57-Q87): Air Force

Housing/Facility/Service Aspect	Responses (%)			
	N/A	Dissatisfied	Neutral	Satisfied
Q65: Availability/quality of government furniture	1.6	47.9	14.1	36.3
Q58: Bedroom size(s)	0.0	41.0	7.6	51.3
Q69: Heating system adequacy	1.1	39.5	7.2	52.1
Q59: Living/dining room size	0.0	38.1	9.8	52.0
Q57: Overall size of residence	0.3	34.7	7.3	57.7
Q74: Degree of privacy	0.1	28.6	13.6	57.7
Q84: Convenience of residence to major medical facilities	1.1	27.0	13.5	58.3
Q75: External appearance of residence	0.0	24.6	16.4	59.1
Q67: Water purity	0.1	23.5	13.2	63.2
Q76: Neighborhood appearance	0.2	22.9	15.6	61.3
Q72: Maintenance/repair services on residence	7.4	21.1	13.7	57.9
Q63: Number of kitchen appliances furnished	1.0	20.8	9.0	69.2
Q60: Number of bedrooms	0.0	20.2	12.1	67.7
Q61: Number of bathrooms	0.0	18.7	10.7	70.6
Q62: Operating condition of kitchen appliances	0.6	17.0	9.1	73.3
Q64: Laundry facility adequacy	0.8	16.9	6.5	75.8
Q83: Convenience of residence to dispensary/clinic	0.8	16.9	10.5	71.8
Q87: Accessibility to public transportation	9.9	16.6	25.6	47.9
Q68: Hot water supply	0.0	16.0	8.4	75.6
Q81: Convenience of residence to installation	4.3	14.3	10.6	70.8
Q66: Adequacy of electric service	0.1	13.7	11.5	74.7
Q82: Convenience of residence to government facilities	0.8	12.6	11.6	75.0
Q73: Personal safety/security	0.1	10.4	11.6	77.9

Table J-35 shows that the availability and quality of government furniture was rated highest in dissatisfaction by the Air Force respondents. More people were dissatisfied than satisfied. Similar to the Navy, size of residence (including bedroom and living/dining room sizes) and heating systems were among the highest in dissatisfaction. However, all the aspects of housing, facilities, and services, with the exception of government furniture, showed more satisfaction than dissatisfaction. About 40 percent of the 23 items showed satisfaction by 70 percent or more of the respondents.

Table J-36 shows that most of the areas related to children and costs received either roughly equal percentages of satisfaction and dissatisfaction or a preponderance of satisfaction ratings. Convenience to recreational facilities, along with the number/availability of these facilities for children, received the highest percentage of dissatisfied responses.

Table J-36

Satisfaction with Aspects Not Applicable to 10 Percent  
or More of the Respondents (Q57-Q87): Air Force

Housing/Facility/Service Aspect	Responses (%)			
	N/A	Dissatisfied	Neutral	Satisfied
Q79: Convenience of residence to playgrounds	15.6	30.6	13.3	40.5
Q80: Convenience of residence to youth activity centers	20.6	28.9	19.2	31.4
Q78: Number/availability of recreation for preteens	24.2	28.4	16.6	30.8
Q77: Number/availability of recreation for teens	37.2	26.0	15.6	21.3
Q71: Housing costs	42.4	17.7	10.3	29.5
Q85: Availability of child care services/facilities	26.4	15.3	19.5	38.7
Q70: Utility costs	48.3	13.5	9.1	29.0
Q86: Transportation time for children bused to school	47.7	7.8	13.7	30.7

Pay grade group was strongly and consistently related to 30 of the 31 satisfaction items. In general, the E-1 to E-3 group was less satisfied, statistically, than were most of the other pay grade groups on almost all aspects of housing, facilities, and services. On many of the items measured, the E-1 to E-3 group was statistically less satisfied than each of the other pay grades.

Presence or absence of children was not consistently or strongly related to responses on most of the 31 items. Items relating to children were not answered by a majority of those without children.

As in the Navy, housing type was a powerful influence on almost all aspects of satisfaction. Table J-37 shows the percentage of respondents dissatisfied and satisfied

with aspects of their housing, facilities, and services by housing type. Government-leased housing is not included since only a few respondents lived in this type.

Service members living in government-owned housing were more satisfied and less dissatisfied than those in economy housing. For many items, the largest difference between the two groups were in the extreme categories, very satisfied and very dissatisfied.

Marine Corps Responses to Satisfaction Items. Tables J-38 and J-39 present the satisfaction data for the Marine Corps sample.

The Marine Corps respondents expressed most dissatisfaction with the adequacy of the heating system. This was the only one of the 31 items that showed a majority dissatisfied. Size of the residence (including size of bedrooms and living/dining rooms) and convenience to major medical facilities also showed high levels of dissatisfaction. However, even for these items, a larger percentage reported satisfaction than dissatisfaction. Most of the items showed a clear majority satisfied (60% or more).

In Table J-38 satisfaction with items for which 10 percent or more responded not applicable showed Marine Corps respondents more dissatisfied than satisfied with government furniture and recreational facilities for preteen children. The other items dealing with children and housing/utility costs showed approximately equal percentages satisfied and dissatisfied.

Pay grade group was statistically related to some of the satisfaction items, but again not in a strong, consistent manner. The presence or absence of children was related to a small number of satisfaction items. Service members with children were more satisfied and less dissatisfied than those without children with aspects of the kitchen, laundry facilities, heating, external appearance of the residence, and neighborhood appearance. Relatively few respondents without children answered the items directly related to children.

Only a few respondents lived in government-leased housing. Table J-40 shows the percentages dissatisfied and satisfied by current type of housing.

Respondents in government-owned housing were more satisfied than those in economy housing on 30 of 31 items. The differences were statistically powerful and often carried the greatest weight in the extreme categories, especially very satisfied. Those in government-owned housing were often much more likely to express strong satisfaction than those in economy housing. The opposite held for those in economy housing. That is, a much higher percent expressed strong dissatisfaction (very dissatisfied).

In Japan/Okinawa, in all three Services, living in government-owned housing appears to be far more desirable on every factor measured than living in economy housing.

#### Usage of Facilities

A series of items addressed the reliance of service members and their families on government and economy facilities by asking whether or not the facilities were available and their typical level of usage. Usage was categorized as follows: Always or mostly use economy facilities, use about half economy and half government, and always or mostly use government facilities. Table J-41 shows usage for the nine listed facilities by each Service.

Table J-37

Satisfaction with Aspects of Housing, Facilities, and Services (Q57-Q87) by Housing Type (Q44): Air Force

Aspect	Responses (%)			
	Government-owned (n = 1307)		Economy (n = 279)	
	Dissat.	Sat.	Dissat.	Sat.
Q57: Overall size of residence	29.2	64.2	59.1	30.5
Q58: Bedroom size(s)	36.0	57.2	62.4	26.2
Q59: Living/dining room size	32.6	58.0	62.4	26.9
Q60: Number of bedrooms	17.6	71.2	30.8	52.0
Q61: Number of bathrooms	14.7	76.6	37.6	43.7
Q62: Operating condition of kitchen appliances	11.1	81.0	41.2	39.8
Q63: Number of kitchen appliances furnished	16.2	76.5	41.2	36.6
Q64: Adequacy of the laundry facilities	8.2	86.1	52.7	32.6
Q65: Availability/quality of government furniture	45.9	38.8	56.4	25.7
Q66: Adequacy of electrical service	9.6	81.9	33.3	41.9
Q67: Purity of the water	20.4	68.6	35.8	40.9
Q68: Hot water supply	12.7	80.8	29.4	53.8
Q69: Adequacy of heating system (including insulation)	29.5	62.8	82.1	6.8
Q70: Cost of utilities <sup>a</sup>	1.7	32.1	65.0	16.1
Q71: Cost of housing <sup>a</sup>	7.9	31.6	58.6	20.7
Q72: Maintenance/repair services on residence	15.8	64.8	42.1	29.3
Q73: Personal safety/security	7.5	82.9	23.3	55.9
Q74: Degree of privacy	28.0	59.3	30.8	49.5
Q75: External appearance of the residence	19.4	65.6	47.0	31.2
Q76: Appearance of the neighborhood	16.6	69.3	51.3	26.2
Q77: Number/availability of recreational facilities for teenage children <sup>a</sup>	25.7	24.6	25.4	6.8
Q78: Number/availability of recreational facilities for preteen children <sup>a</sup>	27.0	35.7	34.3	10.7
Q79: Convenience of residence to playgrounds <sup>a</sup>	26.9	47.3	46.4	12.1
Q80: Convenience of residence to youth activity centers <sup>a</sup>	25.9	37.4	41.1	6.1
Q81: Convenience of the residence to the installation	11.5	74.8	24.7	55.6
Q82: Convenience of residence to government facilities	8.8	80.5	27.2	52.7
Q83: Convenience of residence to medical dispensary/clinic	12.9	77.6	31.9	49.1
Q84: Convenience of residence to major medical facilities	24.3	62.7	37.4	42.1
Q85: Availability of child care services and facilities <sup>a</sup>	14.3	42.3	16.4	26.4
Q86: Transportation time for children bused to school <sup>a</sup>	7.0	35.2	9.6	13.2
Q87: Accessibility of public transportation <sup>a</sup>	15.6	50.7	21.4	34.3

<sup>a</sup>Not applicable to 10 percent or more of the respondents.

Improvements Needed by Pay Grade Group: Navy

Improvement	Responses (%)					
	E-1 to E-3 (n = 63)	E-4 to E-6 (n = 305)	E-7 to E-9 (n = 343)	W-2 to W-4 (n = 38)	O-1 to O-3 (n = 210)	O-4 to O-6 (n = 220)
Family housing (71.7%)	66.7	72.5	68.5	73.7	71.4	76.8
Temporary lodgings (45.0%)	33.3	41.6	39.4	39.5	47.6	60.0
Youth facilities (36.4%)	20.6	27.2	39.9	34.2	36.2	48.6
Commissaries (34.0%)	49.2	41.6	32.4	28.9	36.7	20.0
Recreational facilities (33.0%)	28.6	24.6	34.1	34.2	44.3	33.2
Medical facilities (28.8%)	27.0	37.0	29.7	34.2	21.4	22.3

Table J-48 shows the percentage of respondents in each Service who selected each of the 14 areas of needed improvement among their four choices.

Table J-48  
Choices of Improvements Needed (Q123-Q126)

Improvement	Navy		Air Force		Marine Corps	
	%	Rank	%	Rank	%	Rank
Family housing	71.7	1	63.3	1	72.6	1
Temporary lodging facilities	45.0	2	49.7	2	37.1	4
Youth facilities	36.4	3	27.8	6	23.5	9
Commissaries	34.0	4	21.5	10	39.9	3
Recreation facilities	33.0	5	27.7	7	25.5	7
Medical facilities	28.8	6	37.5	4	44.1	2
Exchanges	27.6	7	22.5	9	27.9	6
Parking facilities	26.7	8	46.6	3	10.6	13
Family entertainment facilities	26.5	9	23.9	8	22.5	10
Child care facilities	20.8	10	11.3	13	15.0	12
Work areas	18.5	11	29.9	5	23.6	8
Troop barracks, dorms	12.8	12	18.6	11	32.6	5
Dental facilities	12.7	13	15.4	12	21.4	11
Religious facilities	3.1	14	2.1	14	2.0	14

The overwhelming choice for needed improvement was family housing. Other frequently chosen areas for improvement across the three Services were temporary lodging and medical facilities. Areas selected least often as needing improvement were religious, child care, and dental facilities.

The major difference among the three Services were that commissaries were less frequently selected by Air Force service members than by the Navy and Marine Corps samples, medical facilities were more often chosen by the Marine Corps sample than the Navy sample, troop barracks were much more frequently selected by the Marine Corps respondents, and parking facilities were more frequently chosen by the Air Force than the Navy service members, who in turn chose this area more frequently than the Marine Corps members.

None of the analyses up to now have included unaccompanied service members, who are considered with special groups.

#### Navy Response Differences by Pay Grade Group, Housing Type, and Household Composition

Tables J-49, J-50, and J-51 present the percent of each pay grade group selecting the improvements that were chosen by at least 28 percent of all the respondents. The percentage in parentheses beside each improvement is the percentage of the total accompanied Service sample who selected that improvement.

Respondents with children in their household more often reported child care and school problems compared to those without children who reported more problems with spouse employment.

#### Reporting of the Most Serious Problem (Q140)

The first problem selected of the three was labelled "most serious." Each of the 21 listed problems would be expected to average approximately 5 percent selection if choices were made randomly or if each individual had problems different and unique from everyone else. Table J-47 presents the five problems most frequently selected as most serious.

Table J-47

#### "Most Serious" Problems for Each Service (Q140)

Problem	Responses (%)		
	Navy	Air Force	Marine Corps
Permanent housing	16.7	12.2	17.3
Initial housing costs	11.5	10.1	10.2
Language and cultural differences	9.7	9.7	--
Temporary lodging	8.0	--	7.7
Vehicles	7.3	14.4	8.6
Medical/dental care	--	--	9.7
Shipping/storage of household goods	--	8.6	--

Permanent housing, initial housing costs, and vehicles were frequently selected in all three Services. Language and cultural differences were chosen in the Navy and Air Force samples and temporary housing in the Navy and Marine Corps samples. Unique to the Marine Corps was selection of medical/dental care and to the Air Force was selection of shipping and storage problems.

### IMPROVEMENTS NEEDED

Respondents were asked to select from a list of 14 the 4 most important areas for which they believed construction, expansion, leasing, or renovation was needed to improve living and working conditions at their current location. The list included some areas that were listed as problems (e.g., child care, recreation, medical care, temporary lodgings, family housing) and some new ones (e.g., exchanges, commissaries, troop barracks, parking facilities).

#### Overall Choices of Improvements Needed

If respondents had chosen randomly from the list, an average of 28 percent would have been expected for each area (4 out of 14). Therefore, 32 percent or more and 24 percent or less selecting an area represent statistically meaningful indications of choice and nonchoice.

Table J-46

## Problems by Pay Grade Group: Marine Corps

Problem	Responses (%)					
	E-1 to E-3 (n = 48)	E-4 to E-6 (n = 207)	E-7 to E-9 (n = 185)	W-1 to W-4 (n = 64)	O-1 to O-3 (n = 167)	O-4 to O-6 (n = 105)
Vehicles (22.7)	18.8	20.8	33.0	21.9	16.8	20.0
Shipping/storage of household goods (23.7)	14.6	17.9	28.1	14.1	28.7	29.5
Language and cultural differences (19.6)	16.7	24.2	12.4	14.1	26.9	16.2
Temporary lodging (19.8)	18.8	12.1	27.6	20.3	20.4	21.0
Permanent housing (32.1)	18.8	27.5	30.3	51.6	33.5	36.2
Initial housing costs (29.5)	39.6	25.6	35.7	26.6	28.7	24.8
Living expenses (15.9)	18.8	15.5	16.2	25.0	15.0	10.5
Spouse employment (21.8)	37.5	25.1	20.0	21.9	20.4	13.3
Medical/dental care (24.7)	22.9	20.9	27.0	18.8	18.6	22.9



Table J-45

## Problems by Pay Grade Group: Air Force

Problem	Responses (%)				
	E-1 to E-3 (n = 211)	E-4 to E-6 (n = 422)	E-7 to E-9 (n = 363)	O-1 to O-3 (n = 238)	O-4 to O-6 (n = 175)
Vehicles (39.2)	27.5	39.1	46.3	35.7	43.3
Shipping/storage of household goods (24.9)	9.5	20.9	34.7	24.4	33.7
Language and cultural differences (26.3)	31.3	30.6	17.9	26.1	28.0
Temporary lodging (20.8)	8.1	17.3	22.6	31.5	26.3
Permanent housing (24.3)	33.6	20.1	19.3	26.1	31.4
Initial housing costs (28.6)	33.6	29.6	33.6	24.8	14.9
Living expenses (18.8)	29.4	21.6	17.9	14.7	6.9
Spouse employment (25.8)	35.1	28.2	20.7	23.9	21.7

In the Air Force sample, residents of government-owned housing were more likely than those in economy housing to report serious problems with vehicles (shipping, insurance, inspections) and with temporary lodging facilities. Respondents living in economy housing were more likely than those in government-owned housing to report problems with permanent housing, local telephone service, initial housing costs, and living expenses.

By household composition, respondents with children were more likely to report child care and school problems compared to greater reporting of spouse employment problems among those without children.

### Marine Corps

Table J-46 shows the problems by pay grade group for the Marine Corps sample.

Table J-46 shows that the E-7 to E-9 group reported vehicles as a serious problem more often than the other pay grades did. The junior enlisted group (E-1--E-3) reported permanent housing less often as one of the three most serious problems. Compared to the other pay grade groups, the E-1 to E-3 group was more concerned with initial housing costs (along with the E-7 to E-9s) and with spouse employment. Senior enlisted people and the officers reported shipping and storage of household goods as problems more often than did other groups. Again, as in the Navy sample, there were differences within officer and enlisted pay grade groups. Responses of all enlisted and officer pay grades were not alike.

Marine Corps respondents living in government-owned housing were more likely than those in economy housing to report problems with temporary lodging facilities. In contrast, residents of economy housing more often reported problems with permanent housing and living expenses.

Table J-44

## Problems by Pay Grade Group: Navy

Problem	Responses (%)					
	E-1 to E-3 (n = 72)	E-4 to E-6 (n = 327)	E-7 to E-9 (n = 351)	W-2 to W-4 (n = 35)	O-1 to O-3 (n = 219)	O-4 to O-6 (n = 228)
Vehicles (22.2)	6.9	20.2	26.2	14.3	23.3	24.2
Shipping/storage of household goods (16.8)	9.7	11.0	17.1	25.7	15.1	27.2
Language and cultural differences (28.8)	55.6	31.8	22.8	20.0	27.4	28.1
Temporary lodging (21.1)	5.6	14.4	23.1	20.0	26.9	27.2
Permanent housing (31.8)	15.3	26.3	32.8	37.1	33.3	41.2
Initial housing costs (31.9)	34.7	29.1	39.6	40.0	34.2	19.7
Living expenses (19.3)	29.2	25.1	22.5	20.0	11.4	10.5
Spouse employment (18.9)	34.7	24.5	14.5	11.4	22.8	10.1
Family adjustment (14.3)	29.2	15.3	8.0	11.4	15.5	17.1

Table J-43 demonstrates differences as well as similarities among the Services. Initial housing costs were a problem for a relatively high percentage of respondents in the three Services, as were permanent housing, vehicles, language and cultural differences, temporary lodging, and spouse employment. Vehicle problems were reported most frequently by the Air Force sample (39.2%) and represent the highest choice of any problem in any of the three Services. There are regulations concerning shipping private vehicles into Japan and weight limitations on shipping personal items imposed by the Air Force. Other problems showing a relatively high choice by at least two of the three Services were living expenses and shipping and storage of household goods. Medical/dental care was a problem to a relatively high degree only in the Marine Corps sample (24.7%).

Areas that were not among the most serious problems in all three Services included security, utility service, shopping, child care, recreation, entertainment, and separation due to unaccompanied status. Frequently selected problems tended to be concentrated in areas dealing with housing (permanent and temporary), money/costs and getting one's possessions to Japan/Okinawa.

### Navy

Table J-44 shows the percent of each pay grade group that selected each problem. Only those problems are shown that were selected by at least 14 percent of all the respondents. The percentage next to each problem is the percentage of all respondents in that Service selecting that problem.

For the Navy junior enlisted service members, vehicles and temporary and permanent housing were less serious problems than for other pay grade groups. On the other hand, a much higher percentage of this group reported language and cultural differences among the most serious problems, and they were more concerned with spouse employment and family adjustment than the other pay grades were. At the other end of the pay grade spectrum, officers selected initial housing costs and living expenses less often than the enlisted people did.

The relationship between type of housing and problems showed those living in government-owned housing more likely than those in government housing to report a problem with temporary lodging facilities. Residents of economy housing were more likely than those in government-owned housing to report problems with initial housing costs and living expenses.

By household composition, spouse employment was a more frequent problem for those without children, while those with children more frequently reported child care and school problems. However, the percentages selecting these problems were small.

### Air Force

Table J-45 presents problems by pay grade group for the Air Force sample.

The E-1 to E-3 group was less likely than other pay grade groups to report shipping and storage and temporary lodging as among the most serious problems faced. Spouse employment and living expenses were reported as problems more often by the junior enlisted than most other groups. Senior officers selected living expenses and initial housing costs less often than all other groups. The E-7 to E-9 group was less troubled by language and cultural differences than other pay grades. Unlike the other two Services, permanent housing was chosen frequently (33.6%) by the E-1 to E-3 group--more than any other group except the senior officers.

## PROBLEMS

Again, the results shown in this section are for accompanied respondents.

### Reporting of Problem Areas

Respondents were asked to choose, from a list of 21 the three most serious problems (in rank order of seriousness) encountered by them and their dependents at their present foreign location. Table J-43 shows by Service the percentage who chose each of the problems as their first, second, or third most serious. One would expect an average of 14 percent (3 choices in 21) for each problem if choices were made randomly. Thus, percentages of about 18 percent or more, or 10 percent or less, are statistically meaningful in terms of expectations based on random choice. Higher and lower percentages indicate definite trends toward choice or nonchoice of a problem by the samples.

Table J-43

Problem Areas Selected as One of the Three Most Serious (Q140-Q142)

Problem	Navy		Air Force		Marine Corps	
	%	Rank	%	Rank	%	Rank
Initial housing costs	31.9	1	28.6	2	29.5	2
Permanent housing	31.8	2	24.3	6	32.1	1
Language and cultural differences	28.8	3	26.3	3	19.6	8
Vehicles (shipping, insurance, etc.)	22.2	4	39.2	1	22.7	5
Temporary lodging	21.1	5	20.8	7	19.8	7
Living expenses (including utilities)	19.3	6	18.8	8	15.9	9
Spouse employment	18.9	7	25.8	4	21.8	6
Shipping and storing household goods	16.8	8	24.9	5	23.7	4
Family adjustment to new situation	14.3	9	13.4	9	13.8	10
Working conditions	13.9	10	12.6	10	10.3	12
Medical/dental care	13.3	11	10.9	11	24.7	3
Transportation	13.2	12	6.4	16	8.6	14
Separation and related problems	9.1	13	4.5	17	10.2	13
Schools	8.0	14.5	7.4	15	4	17
Recreation and entertainment	8.0	14.5	7.5	14	6.7	16
Local telephone service	7.0	16	9.0	12	12.6	11
Child care	6.0	17.5	2.9	19	5.9	18
Other (unspecified)	6.0	17.5	4.1	18	4.0	19
Shopping	5.8	19	8.9	13	7.3	15
Security	1.4	20.5	1.1	21	1.5	20
Utility service (other than costs)	1.4	20.5	1.8	20	1.4	21

### Loaner Furniture

Opinions about loaner furniture were analyzed for all those who answered the questions, including individuals who may or may not have used loaner furniture before obtaining their own. Items dealt with the quantity, condition, and size of loaner furniture. Results are shown in Table J-42.

Table J-42  
Opinions of Loaner Furniture (Q101-Q103)

Opinion	Responses (%)			
	Navy	Air Force	Marine Corps	Total
Adequacy of the quantity of loaner furniture	(n = 776)	(n = 1209)	(n = 468)	(n = 2453)
Less than needed	16.4	14.6	12.7	15.7
Adequate	76.3	70.6	79.4	73.1
More than needed	7.3	14.9	7.9	11.2
Satisfaction with the condition of loaner furniture	(n = 773)	(n = 1236)	(n = 475)	(n = 2484)
Dissatisfied	35.1	46.1	49.4	44.3
Neither dissatisfied nor satisfied	21.2	15.2	16.0	17.4
Satisfied	43.7	38.7	34.7	38.2
Appropriateness of the size of loaner furniture	(n = 768)	(n = 1238)	(n = 466)	(n = 2472)
Too small	11.7	12.9	8.1	10.1
Right size	79.0	75.5	81.9	79.8
Too large	9.2	11.6	10.0	10.1

Service members generally believed that the loaner furniture was adequate with respect to quantity and appropriate with respect to size. Between 21 and 30 percent believed the quantity was too much or too little, and 18 to 25 percent believed the furniture was too big or too small. A substantially higher percentage were dissatisfied with the condition of the furniture, ranging from 35 to 49 percent in the three Services.

Pay grade did not show strong relationships to opinions about furniture in the Navy sample. Air Force E-1 to E-3s were more likely than the other pay grade groups to report that the furniture was less than needed, they were dissatisfied with the condition, and the furniture was too large. In the Marine Corps, slightly more enlisted and warrant officers than the 0-4 to 0-6 group thought the quantity was adequate.

For all facilities, respondents used government facilities much more than economy facilities. There was almost an exclusive use (90% or more) of government medical/dental, school, and library facilities. Government religious and child care facilities were used by 80 percent or more of all three Services and over 80 percent of the Marine Corps and Air Force samples mostly or always used government food shopping facilities. Less than 20 percent of the respondents in the three Services mostly or always used economy facilities for any of the nine listed. Mixed use of government and economy facilities (half and half) occurred most often for nonfood shopping, recreation, entertainment, and food shopping. Navy respondents tended to use both economy and government facilities (half and half) slightly more often than the other two Services for food shopping, nonfood shopping, and entertainment facilities. The use of government facilities is underestimated, if one looks only at the last column of Table J-41, since those responding half and half also used these facilities. In summary, service members and their families in Japan/Okinawa relied very heavily on U.S. government facilities.

#### Use of and Satisfaction with Government-furnished and Loaner Furniture

Beyond the single satisfaction item on government furniture in the list of 31 aspects of housing, facilities, and services, service members were asked to respond to five items concerning their opinions toward and experience with government-furnished and loaner furniture.

##### Government-furnished Furniture (Q99-Q100)

Among the Navy sample, the vast majority (87.5%) were using their own or mostly their own furniture, with 72 percent reporting that they were using all their own furniture. In contrast, in the Air Force group, the majority were using mostly or all government furniture (68.2%), with most of these using mostly government and some of their own. Only 5.6 percent were using all their own furniture, with the remainder using mostly their own and some government furniture. The Marine Corps group fell in between, with 28.3 percent using mostly or all government furniture, about 48 percent using all their own and 23 percent using mostly their own and some government furniture.

By pay grade groups, the following differences emerged:

1. Navy--E-1 to E-3 group was less likely to have all their own furniture and more likely to be using government furniture than the other pay grade groups.
2. Marine Corps--E-1 to E-3 group was more likely to be using all their own furniture and less likely to be using mostly government furniture than the other pay grades.
3. Air Force--E-1 to E-3 group was more likely to be using mostly their own furniture than the 0-4 to 0-6 group; the 0-4 to 0-6 group, more likely to be using mostly government furniture than the other groups.

Almost all respondents preferred to use all their own or mostly their own furniture in all Services (about 85%), with most of these preferring to use all of their own. No strong differences among pay grades were found across all three Services in this preference.

Table J-41

## Usage of Economy and Government Facilities

Facilities	Responses (%)						
	Navy		Air Force		Marine Corps		Total
	Enlisted	Officer	Enlisted	Officer	Enlisted	Officer	Officer
<b>Q90: Food shopping facilities</b>							
Economy	5.7	1.3	1.3	1.0	3.2	2.3	3.2
Half and half	30.3	22.3	14.1	8.8	19.5	10.9	20.7
Government	64.0	76.4	84.6	90.2	77.3	86.8	76.1
<b>Q91: Nonfood shopping facilities</b>							
Economy	11.5	5.0	6.7	3.9	10.1	5.1	9.0
Half and half	40.1	30.5	28.9	25.2	35.7	22.3	34.1
Government	48.4	64.5	64.4	70.9	54.2	72.6	57.0
<b>Q92: Medical/dental facilities</b>							
Economy	0.9	0.3	1.0	0.6	1.3	1.5	1.1
Half and half	3.8	1.5	1.0	0.6	4.5	1.8	2.6
Government	95.3	98.2	97.9	98.8	94.3	96.7	96.3
<b>Q93: School facilities</b>							
Economy	4.5	6.6	2.7	2.7	5.1	4.5	3.7
Half and half	2.4	4.9	1.8	2.2	2.7	5.2	2.1
Government	93.1	88.5	95.5	95.1	92.2	90.3	94.1
<b>Q94: Recreation (sports) facilities</b>							
Economy	6.4	4.8	6.1	4.9	8.4	6.5	6.6
Half and half	22.2	17.9	22.0	17.2	25.3	19.7	22.7
Government	71.4	77.4	71.9	77.8	66.3	73.8	70.6
<b>Q95: Entertainment (theatre, etc.) facilities</b>							
Economy	12.3	8.5	4.1	4.3	9.5	5.2	8.0
Half and half	32.6	28.5	20.9	16.4	28.8	22.0	26.4
Government	55.1	63.0	74.9	79.3	61.7	72.8	65.6
<b>Q96: Religious facilities</b>							
Economy	12.1	5.1	15.7	13.3	16.2	14.3	14.6
Half and half	4.8	3.4	5.1	3.0	3.6	4.1	4.7
Government	83.0	91.5	79.2	83.7	80.2	81.6	80.7
<b>Q97: Library facilities</b>							
Economy	1.0	0.7	1.0	0.2	0.7	0.3	0.9
Half and half	3.0	1.2	1.4	0.4	2.0	1.6	2.1
Government	95.9	98.1	97.6	99.4	97.3	98.2	97.0
<b>Q98: Child care facilities</b>							
Economy	6.9	5.5	9.6	5.9	11.3	8.3	9.0
Half and half	5.3	3.8	3.1	2.7	4.4	5.1	4.1
Government	87.7	90.8	87.3	91.4	84.3	86.6	86.8

Table J-40

Satisfaction with Aspects of Housing, Facilities, and Services (Q57-Q87) by Housing Type (Q44): Marine Corps

Aspect	Responses (%)			
	Government-owned (n = 477)		Economy (n = 337)	
	Dissat.	Sat.	Dissat.	Sat.
Q57: Overall size of residence	27.9	66.2	50.7	40.4
Q58: Bedroom size(s)	38.5	56.1	51.9	36.2
Q59: Living/dining room size	30.8	61.1	53.4	34.1
Q60: Number of bedrooms	13.2	77.7	35.3	48.4
Q61: Number of bathrooms	22.8	71.8	39.2	44.8
Q62: Operating condition of kitchen appliances	11.8	82.6	35.8	44.7
Q63: Number of kitchen appliances furnished	18.9	72.6	40.9	31.5
Q64: Adequacy of the laundry facilities	8.3	84.4	62.5	20.8
Q65: Availability/quality of government furniture <sup>a</sup>	45.0	30.3	43.5	16.7
Q66: Adequacy of electrical service	15.1	77.6	27.1	55.7
Q67: Purity of the water	24.5	66.1	23.5	56.5
Q68: Hot water supply	13.8	80.8	31.5	57.1
Q69: Adequacy of heating system (including insulation)	45.4	49.2	79.4	7.8
Q70: Cost of utilities <sup>a</sup>	1.7	27.5	53.4	27.9
Q71: Cost of housing <sup>a</sup>	11.7	33.1	36.2	43.0
Q72: Maintenance/repair services on residence	27.7	59.3	28.8	41.8
Q73: Personal safety/security	9.8	82.4	13.1	69.6
Q74: Degree of privacy	20.3	72.4	25.0	61.9
Q75: External appearance of the residence	21.3	67.4	31.0	52.4
Q76: Appearance of the neighborhood	17.2	71.1	31.0	44.9
Q77: Number/availability of recreational facilities for teenage children <sup>a</sup>	31.1	27.4	32.0	7.4
Q78: Number/availability of recreational facilities for preteen children <sup>a</sup>	34.0	37.8	40.9	10.4
Q79: Convenience of residence to playgrounds <sup>a</sup>	26.6	53.5	44.8	16.6
Q80: Convenience of residence to youth activity centers <sup>a</sup>	27.4	44.6	42.7	10.1
Q81: Convenience of the residence to the installation	16.1	71.8	21.7	63.7
Q82: Convenience of residence to government facilities	10.3	81.8	24.5	59.1
Q83: Convenience of residence to medical dispensary/clinic	22.4	70.1	31.3	53.3
Q84: Convenience of residence to major medical facilities	32.7	58.9	45.2	39.0
Q85: Availability of child care services and facilities <sup>a</sup>	21.0	48.3	22.3	26.4
Q86: Transportation time for children bused to school <sup>a</sup>	7.5	40.0	14.2	16.9
Q87: Accessibility of public transportation	12.9	66.8	11.3	61.7

<sup>a</sup>Not applicable to 10 percent or more of the respondents.



Table J-39

Satisfaction with Aspects Not Applicable to 10 Percent  
or More of the Respondents (Q57-Q87): Marine Corps

Housing/Facility/Service Aspect	Responses (%)			
	N/A	Dissatisfied	Neutral	Satisfied
Q65: Availability/quality of government furniture	18.2	44.2	13.3	24.3
Q78: Number/availability of recreation for preteens	24.9	36.9	12.2	25.9
Q79: Convenience of residence to playgrounds	16.7	34.5	10.6	38.3
Q80: Convenience of residence to youth activity centers	22.9	33.6	13.2	30.3
Q77: Number/availability of recreation for teens	38.0	31.6	12.0	18.4
Q70: Utility costs	36.8	24.2	11.8	27.3
Q71: Housing costs	26.4	22.5	14.1	37.0
Q85: Availability of child care services/facilities	24.7	22.3	14.6	38.4
Q86: Transportation time for children bused to school	48.1	10.0	12.1	29.8

Table J-38

Satisfaction with 22 Aspects of Housing, Facilities, and  
Services (Q57-Q87): Marine Corps

Housing/Facility/Service Aspect	Responses (%)			
	N/A	Dissatisfied	Neutral	Satisfied
Q69: Heating system adequacy	3.2	59.3	5.8	31.7
Q58: Bedroom size(s)	0.4	44.3	7.7	47.6
Q59: Living/dining room size	0.4	40.4	9.8	49.4
Q84: Convenience of residence to major medical facilities	1.0	38.9	10.3	49.7
Q59: Overall residence size	0.2	37.5	6.8	55.5
Q64: Laundry facility adequacy	3.0	31.2	8.6	57.2
Q61: Number of bathrooms	0.1	29.9	10.1	59.9
Q63: Number of kitchen appliances furnished	4.9	29.0	11.4	54.7
Q72: Maintenance/repair services on residence	5.4	28.4	15.3	50.9
Q83: Convenience of residence to dispensary/clinic	0.0	27.2	10.8	62.0
Q75: External appearance of residence	0.1	25.8	13.8	60.3
Q67: Water purity	0.3	24.8	13.5	61.4
Q60: Number of bedrooms	0.3	23.7	11.5	64.5
Q76: Neighborhood appearance	0.4	23.3	16.6	59.7
Q74: Degree of privacy	0.3	22.6	9.8	67.4
Q62: Operating condition of kitchen appliances	2.3	22.4	9.1	66.3
Q68: Hot water supply	0.1	21.3	7.9	70.7
Q66: Adequacy of electric service	0.5	20.2	11.5	67.8
Q81: Convenience of residence to installation	0.6	18.5	12.4	68.5
Q82: Convenience of residence to government facilities	0.1	16.9	11.4	71.6
Q87: Accessibility to public transportation	4.9	12.1	18.4	64.6
Q73: Personal safety/security	0.4	11.5	11.3	76.8

Table J-50

## Improvements Needed by Pay Grade Group: Air Force

Improvement	Responses (%)				
	E-1 to E-3 (n = 194)	E-4 to E-6 (n = 423)	E-7 to E-9 (n = 386)	O-1 to O-3 (n = 228)	O-4 to O-6 (n = 168)
Family housing (63.3%)	73.7	62.2	57.0	63.2	69.0
Temporary lodging (49.9%)	34.0	44.9	51.0	59.2	63.7
Parking facilities (46.6%)	49.0	47.8	50.3	39.5	42.3
Medical facilities (37.5%)	40.7	39.5	37.8	36.4	29.8
Work areas (29.9%)	21.1	30.3	31.6	31.1	33.3

Table J-51

## Improvements Needed by Pay Grade Group: Marine Corps

Improvement	Responses (%)					
	E-1 to E-3 (n = 44)	E-4 to E-6 (n = 217)	E-7 to E-9 (n = 186)	W-1 to W-4 (n = 72)	O-1 to O-3 (n = 170)	O-4 to O-6 (n = 120)
Family housing (72.6%)	68.2	66.4	73.1	79.2	76.5	75.0
Medical facilities (44.1%)	40.9	53.0	47.3	30.6	42.4	35.0
Commissaries (39.9%)	40.9	47.0	38.2	40.3	38.8	30.8
Temporary lodgings (37.1%)	25.0	28.6	44.6	36.1	41.2	40.0
Troop barracks (32.6%)	29.5	27.2	25.8	47.2	33.5	44.2

Family housing was most frequently selected by all pay grade groups in the Navy, with two-thirds to three-fourths of each group selecting this as an area of needed improvement. Temporary lodging facilities were more often selected by the senior officers than by the other pay grade groups. Lower graded enlisted people (E-1 to E-6) were less often concerned with improvements in youth and recreation facilities than senior enlisted and officer personnel were. The E-1 to E-6 groups felt that commissaries needed improvement more than the other pay grade groups, especially the senior officers. The senior enlisted service members and the warrant officers showed similar percentages selecting each area of improvement. Junior officers felt a need to improve recreational facilities more than the other pay grade groups. The commissioned officers saw a need for improvement in medical facilities less often than the other groups.

Few effects on choices of improvement areas were found as a function of housing type. Residents of economy housing were somewhat more likely to include exchanges as one of their four most important areas for improvement than were those living in government-owned housing. In contrast, residents of government-owned housing were more likely than those in economy housing to choose youth facilities.

Respondents with children more often than those without children chose youth facilities and child care as needing improvement. Respondents without children in their household more often chose commissaries and exchanges for improvement.

#### Air Force Response Differences by Pay Grade Group, Housing Type, and Household Composition

Again, family housing was most frequently chosen for needed improvement by all Air Force pay grade groups. The junior enlisted personnel selected temporary lodging and work areas less often than the other pay grade groups. All three enlisted groups believed that improvements in parking were needed more than the officers. Officers more often than enlisted personnel selected temporary lodging. Senior officers were less concerned with improvements in medical facilities than most other pay grade groups.

In the Air Force sample, economy housing residents were more likely than residents of government-owned housing to choose exchanges as needing improvement. Government-owned housing residents more often selected youth facilities.

By household composition, respondents with children more often chose youth facilities and child care as needing improvement, compared to their childless counterparts who chose commissaries.

#### Marine Corps Response Differences by Pay Grade Group, Housing Type, and Household Composition

Family housing was most frequently selected by all Marine Corps pay grade groups, with two-thirds to four-fifths of each group believing this was an area needing improvement. The lower grade enlisted respondents selected temporary lodgings less often than the other groups. Warrant officers and senior commissioned officers were more concerned with improvements in troop barracks and dorms than the other groups were. Senior officers selected commissaries less often than the other pay grade groups. Among the five improvement areas selected most frequently by all respondents, there were relatively few consistent, strong differences as a function of pay grade level.

Marine Corps respondents who lived in government-owned housing were more likely than those in economy housing to choose youth facilities and temporary lodgings as needing improvement. Those living in economy housing were more likely than those living in government-owned housing to choose exchanges, commissaries, and work areas.

By household composition, respondents with children in their households more often than childless personnel chose youth facilities and child care. Respondents without children more often chose commissaries, troop barracks, and work areas.

#### Choice of the "Most Important" Improvement Needed

Table J-52 shows the improvements selected most often as the most important by Service. If the choice of the most important improvement was made randomly or if there was no differentiation among the 14 areas listed, the average percentage of choice for each area would be approximately 7 percent.

Table J-52

#### "Most Important" Improvement by Service (Q123)

Improvement	Responses (%)		
	Navy	Air Force	Marine Corps
Family housing	46.4	34.5	40.4
Temporary lodging	9.6	15.3	6.3
Youth facilities	8.6	--	--
Medical facilities	8.0	11.2	16.0
Troop barracks	--	--	11.6
Parking facilities	--	8.3	--

The overwhelming choice in each Service was family housing. Improvement in temporary lodging was the second most frequently selected in the Navy and Air Force samples. Medical facility improvement was also chosen among the most important in all three Services. Troop barracks were of concern in the Marine Corps since many or most of the unaccompanied lived in barracks. However, the concern shown here represents the choices of accompanied Marine Corps personnel only. Parking facilities were a concern among some Air Force service members.

Respondents in Japan, when given a choice in terms of areas of needed improvement, very definitely gave priority to family and temporary housing (as well as troop barracks in the Marine Corps) over most other facilities that are part of the living and working environment.

### POLICY PROPOSALS

Service members were asked to respond to 10 proposals that would affect housing policies. The first six dealt with assignment to government housing, eligibility, and construction of housing for those currently not eligible, and the remaining four dealt with

allowances based on choices made by residents of government housing. Respondents rated each of the proposals on a five point scale from strongly oppose to strongly favor with the midpoint labelled undecided.

### Policy Proposals Affecting Government Housing Assignment

#### Overall Responses by Service

Table J-53 shows the percentages of respondents in favor (strongly favor and somewhat favor), undecided, and opposed to (strongly oppose and somewhat oppose) each of the assignment proposals by enlisted/officer responses. The rank indicates the order of their popularity in terms of the percentage favoring the proposals with the enlisted and officer responses combined.

The majority of respondents in the three services were in favor of extending eligibility to and constructing family housing for those currently not eligible (E1 to E3s and E-4s with less than 2 years of service). Assignment of government family housing based solely on the number of bedrooms required, while maintaining separate officer and enlisted housing, also received majority approval in all three Services.

When the eligibility extension and construction proposals for the E-1 to E-3s and E-4s with less than 2 years of service were presented with negative consequences for others (construction delays and increases in waiting time), the percent in favor declined dramatically across the three Services. No change in assignment procedures was, however, the least popular of the six proposals.

Of interest to note is the strength of the opinions. For proposals where the majority were in favor, a higher percentage rated the *item strongly favor* than somewhat favor across the three Services. The same was generally true for the proposals which the majority opposed--a higher percentage rated the proposals strongly oppose than somewhat oppose.

#### Differences by Pay Grade Group, Housing Type, and Household Composition

In the discussion of each proposal that follows, group response means are negative if they fall below 3.0 and positive if they are above 3.0 on the 5-point response scale. Household composition is defined here as with or without children.

#### Proposal 1 (Q127): Extend Eligibility for Assignment to Government Family Housing to All Service Members With Dependents, Regardless of Pay Grade.

##### Navy

The unconditional extension of eligibility for family housing to those currently ineligible was the most popular of the six assignment proposals among enlisted respondents (66.0% in favor) and second among the officers (59.9% in favor). All pay grade group response means were positive (3.2 to 4.2), with the E-1 to E-3 and E-4 to E-6 groups significantly more in favor of the proposal than the senior enlisted and O-4 to O-6 officers. By current housing type, residents of economy housing were more in favor than those living in government-owned housing. No differences were found by household composition.

Table J-53  
Responses to Policy Proposals Affecting Assignment to Government Housing (Q127-Q132)

Proposal	Rank	Responses (%)					
		In Favor		Undecided		Opposed	
		Enl.	Off.	Enl.	Off.	Enl.	Off.
<b>Navy</b>							
Q127: Extend eligibility for assignment to government family housing to all service members with dependents regardless of pay grade.	1	66.0	59.9	7.1	8.4	26.9	31.7
Q128: Assign government family housing solely on the basis of bedroom requirements, but retain designated officer and enlisted housing.	2	55.1	70.1	12.3	6.2	32.5	23.7
Q129: Construct family housing for personnel (with dependents) in pay grades E-1 to E-3 and E-4 (2 years or less service).	3	59.0	51.7	10.7	12.5	30.3	35.8
Q130: Construct family housing for personnel (with dependents) in pay grades E-1 to E-3 and E-4 (2 years or less service) even if it delays construction of all other government family housing.	6	27.9	20.9	13.2	11.6	58.9	67.6
Q131: Extend eligibility for government family housing to personnel (with dependents) in pay grades E-1 to E-3 and E-4 (2 years or less service) even if time on the waiting list increases for everyone else.	4	36.0	29.2	10.3	9.3	53.7	61.5
Q132: Make no changes to the existing assignment procedures for government family housing.	5	27.3	30.1	17.0	19.1	55.7	50.8
<b>Air Force</b>							
Q127: Extend eligibility for assignment to government family housing to all service members with dependents regardless of pay grade.	1	73.8	65.7	5.4	10.0	20.8	24.3
Q128: Assign government family housing solely on the basis of bedroom requirements, but retain designated officer and enlisted housing.	3	53.9	64.6	14.7	9.7	31.4	25.7
Q129: Construct family housing for personnel (with dependents) in pay grades E-1 to E-3 and E-4 (2 years or less service).	2	68.4	66.7	8.5	12.5	23.1	20.8
Q130: Construct family housing for personnel (with dependents) in pay grades E-1 to E-3 and E-4 (2 years or less service) even if it delays construction of all other government family housing.	5	37.9	35.1	14.8	14.0	47.3	50.9
Q131: Extend eligibility for government family housing to personnel (with dependents) in pay grades E-1 to E-3 and E-4 (2 years or less service) even if time on the waiting list increases for everyone else.	4	47.5	43.4	12.0	12.3	40.5	44.3
Q132: Make no changes to the existing assignment procedures for government family housing.	6	21.0	22.7	14.3	20.2	64.7	57.1
<b>Marine Corps</b>							
Q127: Extend eligibility for assignment to government family housing to all service members with dependents regardless of pay grade.	2	67.3	50.9	6.8	9.9	25.9	39.2
Q128: Assign government family housing solely on the basis of bedroom requirements, but retain designated officer and enlisted housing.	1	63.0	71.7	10.2	5.6	26.8	22.7
Q129: Construct family housing for personnel (with dependents) in pay grades E-1 to E-3 and E-4 (2 years or less service).	3	61.8	51.2	10.0	11.3	28.3	37.5
Q130: Construct family housing for personnel (with dependents) in pay grades E-1 to E-3 and E-4 (2 years or less service) even if it delays construction of all other government family housing.	5	33.7	25.6	13.5	9.1	52.9	63.3
Q131: Extend eligibility for government family housing to personnel (with dependents) in pay grades E-1 to E-3 and E-4 (2 years or less service) even if time on the waiting list increases for everyone else.	4	40.0	27.6	13.3	12.6	46.7	59.8
Q132: Make no changes to the existing assignment procedures for government family housing.	6	23.1	31.7	13.4	17.7	63.5	50.5



### Air Force

This proposal was the most popular of the six among enlisted respondents (73.8% in favor) and second among the officers (65.7% in favor). E-1 to E-3 respondents favored the proposal more than all other groups, and E-4 to E-6 respondents favored it more than the senior enlisted and senior officers. All pay grade group means were positive (3.3 to 4.6). Residents of economy housing were more in favor than those living in government-owned housing. No differences were found by household composition.

### Marine Corps

This proposal was the most popular of the six concerning housing assignment among the enlisted respondents (67.3% in favor) and third among officers (50.9% in favor). All the enlisted pay grade group means were positive (3.2 to 4.2), as well as the warrant officers (3.5), compared to O-1 to O-3 (3.0) and O-4 to O-6 respondents (2.8). E-1 to E-3 respondents were significantly more in favor than the senior enlisted and commissioned officers. E-4 to E-6 respondents were more in favor than both commissioned officer groups. No differences were found by current housing type or household composition.

Proposal 2 (Q128): Assign Government Family Housing Solely on the Basis of Bedroom Requirements, but Retain Designated Officer and Enlisted Housing.

### Navy

This proposal was the third most popular among the enlisted respondents (55.1% in favor), but the most popular of the six assignment proposals among officers (70.1% in favor). By pay grade group, all response means were on the positive side of the scale (3.1 to 4.2). Warrant officers were significantly more in favor than all three enlisted groups, and O-1 to O-3 officers were more in favor than E-4 to E-9 respondents. No differences were found by current housing type. Respondents with children in their households favored the proposal significantly more than those without children.

### Air Force

This proposal was third in popularity among both the enlisted respondents (53.9% in favor) and the officers (64.6% in favor). All group means were on the positive side of the scale (3.2 to 3.6); however, the O-1 to O-3 officers were most in favor, significantly more than the E-4 to E-9 respondents. No differences were found by current housing type. Respondents with children in their households favored the proposal more than those without children.

### Marine Corps

This proposal ranked second in popularity among the enlisted respondents (63.0% in favor) and was first among officers (71.7% in favor). All pay grade group means were positive (3.3 to 4.3), with the W-1 to W-4 respondents significantly more in favor than the E-4 to E-9 and O-4 to O-6 groups. No differences were evident by current housing type; however, respondents with children were more in favor than those without children.

Proposal 3 (Q129): Construct Family Housing for Personnel (With Dependents) in Pay Grades E-1 to E-3 and E-4 (2 Years or Less Service).

Navy

This proposal ranked second in popularity among enlisted respondents (59.0% in favor) and third among officers (51.7% in favor). All pay grade group response means were positive (3.1 to 3.9) except for the commissioned officers (both 3.0). The E-1 to E-3 group was significantly more in favor of the proposal than the E-7 to E-9 and both commissioned officer groups. No differences were found by current housing type or household composition.

Air Force

This proposal ranked second in popularity among the enlisted (68.4% in favor) and first among officers (66.7% in favor). All pay grade group means were positive (3.3. to 4.4), with the E-1 to E-3 respondents significantly more in favor than all other groups and E-4 to E-6 respondents more in favor than the senior enlisted. Residents of economy housing favored the proposal more than those living in government-owned housing. Respondents without children were slightly more in favor than those with children in their households.

Marine Corps

This proposal was third most popular among enlisted respondents (61.8% in favor) and second among officers (51.2% in favor). The enlisted respondent and warrant officer group means were positive (3.1 to 4.3), compared to those of the commissioned officers (2.8 to 2.9). E-1 to E-3 respondents were significantly more in favor than E-7 to E-9s and O-1 to O-6s; E-4 to E-6s were more in favor than O-1 to O-6s; and warrant officers were more in favor than O-4 to O-6s. No differences were found as a function of current housing type or household composition.

Proposal 4 (Q130): Construct Family Housing for Personnel (With Dependents) in Pay Grades E-1 to E-3 and E-4 (2 Years or Less Service) Even if it Delays Construction of All Other Government Family Housing.

Navy

This proposal ranked fifth (out of six) in popularity among the enlisted respondents (27.9% in favor, 58.9% opposed) and was the least popular of the six among officers (20.9% in favor, 67.6% opposed). The E-1 to E-3 pay grade group favored the proposal significantly more than senior enlisted (E-7 to E-9) and commissioned officer groups (O-1 to O-6). Similarly, the E-4 to E-6 group favored the proposal more than the O-4 to O-6 group. However, all pay grade group mean responses were on the negative side of the 5-point scale (1.9 to 2.9). No differences were found by current housing type or household composition.

Air Force

This proposal ranked fifth out of six among both the enlisted (37.9% in favor, 47.3% opposed) and the officers 35.1% in favor, 50.9% opposed). Only the E-1 to E-3 group mean was positive (3.4) and this group was significantly more in favor of the proposal than

all other groups. Residents of economy housing favored the proposal more than those in government-owned housing, and respondents without children favored it more than those with children in their households.

#### Marine Corps

This proposal ranked fifth out of the six among enlisted respondents (33.7% in favor, 52.9% opposed) and last among the officers (25.6% in favor, 65.3% opposed). Response means by pay grade group were all on the negative side of the scale (1.8 to 2.8) except for E-1 to E-3s. E-1 to E-6 respondents were significantly more in favor than O-1 to O-6s and W-1 to W-4s were more in favor than O-4 to O-6s. No differences were found by current housing type or household composition.

Proposal 5 (Q131): Extend Eligibility for Government Family Housing to Personnel (With Dependents) in Pay Grades E-1 to E-3 and E-4 (2 Years or Less Service), Even if Time on the Waiting List Increases for Everyone Else.

#### Navy

This proposal was fourth in popularity among the six concerned with housing assignment among the enlisted respondents (36.0% in favor, 53.7% opposed) and fifth among the officers (29.2% in favor, 61.5% opposed). The E-1 to E-3 pay grade group was significantly more in favor than the senior enlisted and commissioned officer group, and the E-4 to E-6 group favored the proposal more than the senior officers. However, no pay grade group mean fell on the positive side of the response scale (2.2 to 3.0) on this proposal. Residents of economy housing favored the proposal more than those living in government-owned housing. No differences were found by household composition.

#### Air Force

This proposal ranked fourth in popularity and drew mixed responses from both enlisted respondents (47.5% in favor, 40.5% opposed) and officers (43.4% in favor, 44.3% opposed). Only the E-1 to E-3 group strongly favored the proposal (mean response = 3.8) and they were significantly more in favor than all other pay grade groups. Residents of economy housing favored it more than those in government-owned housing, and respondents without children were more in favor than those with children.

#### Marine Corps

This proposal ranked fourth among the enlisted respondents (40.0% in favor, 46.7% opposed) and fifth among officers (27.6% in favor, 59.8% opposed). All pay grade group means were negative (1.9 to 2.9) except the E-1 to E-3s (3.3). E-1 to E-3s were significantly more in favor than E-7 to E-9s and O-1 to O-6s; E-4 to E-6s were more in favor than O-1 to O-6s; and W-1 to W-4s were more in favor than O-4 to O-6s. No differences were found as a function of current housing type or household composition.

Proposal 6 (Q132): Make No Changes to the Existing Assignment Procedures for Government Family Housing.

#### Navy

Maintaining the existing assignment procedures was least popular of the assignment proposals among enlisted respondents (27.3% in favor, 55.7% opposed) and fourth out of

six among officers (30.1% in favor, 50.8% opposed). The E-1 to E-3 pay grade group was the most opposed, significantly more than all other groups (except the W-1 to W-4s). All pay grade group means were negative (1.6 to 2.6). Residents of economy housing opposed the proposal significantly more than those living in government-owned housing. No differences were found by household composition.

#### Air Force

This was the least popular of the six assignment proposals. The enlisted respondents were 21.0 percent in favor, 64.7 percent opposed and the officers were 22.7 percent in favor and 57.1 percent opposed. All pay grade group means were negative (1.4 to 2.6) with the E-1 to E-3 respondents significantly more opposed than all other groups. Similarly, residents of economy housing were more opposed than those living in government-owned housing. Respondents without children also were somewhat more opposed than those with children in their household.

#### Marine Corps

This was the least popular proposal among enlisted respondents (23.1% in favor, 63.5% opposed) and ranked fourth out of six among officers (31.7% in favor, 50.5% opposed). All pay grade group means were negative (1.7 to 2.8) with the O-4 to O-6 group significantly less opposed than E-1 to E-6 and W-1 to W-4 respondents. By current housing type, residents of economy housing were more opposed than those living in government-owned housing. No differences were found by household composition.

### Policy Proposals Affecting Allowances for Government Housing

#### Overall Responses by Service

The four proposals to be discussed dealt with utility usage, allowances for maintenance/repair done by the service member, getting more bedrooms in exchange for payment in addition to BAQ, and choosing to have fewer bedrooms in order to retain part of the BAQ. Table J-54 presents the distribution of responses and popularity ranking of these four proposals by enlisted and officer responses. The rank indicates the order of popularity in terms of percentage in favor, with enlisted and officer responses combined.

The two proposals receiving the highest percent of favorable ratings by respondents in all Services concerned receiving an allowance for doing minor repair work and choosing to live in units with fewer bedrooms in exchange for retention of some BAQ. The proposal receiving the most opposition involved paying additional money (out-of-pocket) to have more bedrooms than ordinarily qualified to have. The proposal concerning a utility allowance received mixed ratings, with slightly more service members in favor than opposed.

#### Differences by Pay Grade Group, Housing Type, and Household Composition

In the discussion of each proposal that follows, group mean responses are negative if they fall below 3.0 (i.e., on the "oppose" side of the scale) and positive if they are above 3.0 (i.e., on the "favor" side). Household composition is defined here as with or without children.

Table J-54  
Responses to Policy Proposals Affecting Allowances  
for Government Housing (Q133-Q136)

Proposal	Rank	Responses (%)					
		In Favor		Undecided		Opposed	
		Enl.	Off.	Enl.	Off.	Enl.	Off.
<u>Navy</u>							
Q133: Provide an annual utility allowance (based on family size, housing size and location) allowing retention of any amount not spent on utilities and requiring out-of-pocket payment for any amount over the allowance.	3	46.1	49.8	14.7	11.7	39.2	38.4
Q134: Provide a reasonable allowance to occupants for doing selected minor repairs and maintenance on their units over and above what would normally be expected of them.	1	71.5	62.6	11.4	11.2	17.1	26.2
Q135: Allow service personnel to get housing with more bedrooms than they are qualified to have if they pay an additional amount of not more than 25% of their BAQ.	4	29.4	30.4	12.5	10.2	58.1	59.4
Q136: Allow service members to retain not more than 25% of their BAQ if they live in housing units with fewer bedrooms than they are qualified to have.	2	63.0	60.7	12.8	10.8	24.2	28.5
<u>Air Force</u>							
Q133: Provide an annual utility allowance (based on family size, housing size and location) allowing retention of any amount not spent on utilities and requiring out-of-pocket payment for any amount over the allowance.	3	43.8	47.0	17.0	12.8	39.3	40.3
Q134: Provide a reasonable allowance to occupants for doing selected minor repairs and maintenance on their units over and above what would normally be expected of them.	2	61.5	53.8	15.6	12.9	22.9	33.3
Q135: Allow service personnel to get housing with more bedrooms than they are qualified to have if they pay an additional amount of not more than 25% of their BAQ.	4	25.0	28.3	13.4	10.6	61.6	61.0
Q136: Allow service members to retain not more than 25% of their BAQ if they live in housing units with fewer bedrooms than they are qualified to have.	1	58.6	65.3	17.1	10.5	24.3	24.3
<u>Marine Corps</u>							
Q133: Provide an annual utility allowance (based on family size, housing size and location) allowing retention of any amount not spent on utilities and requiring out-of-pocket payment for any amount over the allowance.	3	45.6	47.3	10.6	12.3	43.8	40.5
Q134: Provide a reasonable allowance to occupants for doing selected minor repairs and maintenance on their units over and above what would normally be expected of them.	2	64.8	59.6	13.8	9.1	21.4	31.2
Q135: Allow service personnel to get housing with more bedrooms than they are qualified to have if they pay an additional amount of not more than 25% of their BAQ.	4	25.6	28.0	9.8	11.9	64.6	60.1
Q136: Allow service members to retain not more than 25% of their BAQ if they live in housing units with fewer bedrooms than they are qualified to have.	1	67.8	63.3	10.1	10.8	22.2	25.9

Proposal 7 (Q133): Provide an Annual Utility Allowance (Based on Family Size, Housing Size, and Location) Allowing You to Keep Any Amount You Did Not Spend on Utilities and Requiring You to Pay Out-of-pocket for Any Amount Over Your Allowance.

Navy

This proposal ranked third out of the four choice-allowance proposals and drew mixed response among both enlisted respondents (46.1% in favor, 39.2 opposed) and officers (49.8% in favor, 38.4% opposed). Pay grade group means were all close to the middle of the scale (2.8 to 3.2); no differences were found between pay grade groups. Residents of economy housing favored the proposal more than those living in government-owned housing, and respondents without children favored it more than those with children.

Air Force

Similar to the Navy respondents, this proposal ranked third in popularity among Air Force personnel (enlisted: 43.8% in favor, 39.3% opposed; officers: 47.0% in favor, 40.3% opposed). Pay grade group means ranged from 2.7 to 3.0, with no differences found between groups. Residents of economy housing favored the proposal more than those in government-owned housing. No differences were found by household composition.

Marine Corps

Third most popular of the four choice-allowance proposals, enlisted respondents were 45.6 percent in favor and 43.8 percent opposed. Officers were 47.3 percent in favor and 40.5 percent opposed. Pay grade group means varied around the middle of the response scale (2.6 to 3.1) with no significant differences by pay grade groups. Residents of economy housing and respondents without children were more in favor of the proposal than those living in government-owned housing and those with children in their households.

Proposal 8 (Q134): Provide a Reasonable Allowance to Occupants for Doing Selected Minor Repairs and Maintenance on Their Units, Over and Above What Would Normally be Expected of Them.

Navy

This was the most popular of the four choice-allowance proposals (enlisted 71.5% in favor, officers 62.6% in favor). All pay grade group means were positive (3.4 to 4.1). The E-1 to E-3 group was the most positive and significantly more so than the O-4 to O-6 group. Residents of economy housing favored the proposal more than those living in government-owned housing. No differences were found as a function of household composition.

Air Force

This was the most popular of the choice-allowance proposals among enlisted respondents (61.5% in favor) and second among the officers (53.8% in favor). E-1 to E-6 respondents favored the proposal significantly more than O-4 to O-6s and E-4 to E-6s favored it more than E-7 to E-9s. All pay grade group means were positive (3.2 to 3.5) except the O-4 to O-6s (2.9). No differences were found by current housing type or household composition.

### Marine Corps

This was the second most popular of the four proposals (enlisted 64.8% in favor, officers 59.6% in favor). All pay grade group means were positive (3.3 to 3.6) except for the O-4 to O-6s (2.9). The E-4 to E-6 group was the most positive and significantly more in favor than the O-4 to O-6s. No differences were found by current housing type. Respondents without children favored the proposal more than those with children in their household.

### Proposal 9 (Q135): Allow Service Personnel to Get Housing Units With More Bedrooms Than They are Qualified to Have if They Pay An Additional Amount of Not More Than 25 Percent of Their BAQ.

#### Navy

This was the least popular of the four proposals (enlisted: 29.4% in favor, 58.1% opposed; officers: 30.4% in favor, 59.4% opposed). All pay grade group means were negative (2.2 to 2.4) with no significant pay grade group differences. No differences were found by current housing type or household composition.

#### Air Force

This was the least popular of the four proposals (enlisted: 25.0% in favor, 61.6% opposed; officers: 28.3% in favor, 61.0% opposed). All pay grade group means were negative (2.0 to 2.4). No differences were found by pay grade group, current housing type, or household composition.

### Marine Corps

This proposal was the least popular of the four (enlisted: 25.6% in favor, 64.6% opposed; officers: 28.0% in favor, 60.1% opposed). All pay grade group means were negative (2.0 to 2.5) with no differences by group. No differences were found by current housing type or household composition.

### Proposal 10 (Q136): Allow Service Members to Retain Not More Than 25 Percent of Their BAQ if They Live in Housing Units With Fewer Bedrooms Than They Are Qualified to Have.

#### Navy

This was the second most popular of the four choice-allowance proposals. The enlisted respondents were 63.0 percent in favor; and the officers, 60.7 percent in favor. All pay grade group means were positive (3.1 to 3.4) with no differences found between groups. Residents of government-owned housing and those with children in their households were more in favor than those living in economy housing and those without children.

#### Air Force

This proposal was second in popularity among the enlisted respondents (58.6% in favor) and first among officers (65.3% in favor). All pay grade group means were positive (3.3 to 3.5) except the E-1 to E-3s (2.9). E-1 to E-3 respondents were significantly less positive than all other groups. Residents of government-owned housing and respondents with children were significantly more in favor than those living in economy housing and those without children.

## Marine Corps

This was the most popular of the four proposals (enlisted, 67.8% in favor, officers 3% in favor). All pay grade group means were positive (3.2 to 3.7) with no significant differences by group. Residents of government-owned housing and respondents with children favored the proposal more than those living in economy housing and those without children in their households.

## **SPECIAL GROUPS**

vy

As shown in Table J-8, a very small number of respondents in the Navy sample fell into the special groups categories, with the exception of relatively high numbers of respondents who had local national spouses and who were unaccompanied. Sample sizes vary widely as a function of the items used to define the special groups. Not all respondents answered the items that were used for the definitions. As a result of this, the number comprising the total sample for each group varies widely.

### Accompanied Female Service Members

Accompanied female service members made up 5.9 percent of the sample (n = 89). This was not a large enough group for analysis; however, a few trends and comparisons to accompanied male service members are presented here.

Over half (50.6%) of the female service members were in the E-4 to E-6 pay grades. Females were more likely than males to have changed marital status since arrival at the current post, base, or duty station and to have relatives and children as dependents, but no spouses. Nearly half (42.3%) were members of dual career couples. Females, more often than males, lived in and preferred to live in economy housing.

Only a few opinion and attitude differences were noted. Females were more often negative or uncertain (42.3%) about making the military a career than males (19.9%) and more often indicated a preference to return to CONUS after completion of the current tour. Female service members, more than their male counterparts, reported their most serious problem as child care and selected child care and medical facilities as the most important improvements needed. The female service members were also somewhat more likely than males to report negative effects of living conditions on job performance and career intentions.

### Accompanied Single Parents

Accompanied single parents made up only 1.4 percent of the sample (n = 21), a number too small for analysis. They were mostly separated, divorced, or widowed (44%), with 28.6 percent single, never married. Single parents, more than married parents, reported their most serious problem as child care and selected child care facilities as the most important improvement needed.

### Comparisons by Spouse Nationalities

Over half of the sample (59.8%) were married to U.S. born spouses (n = 893), 20.3 percent to local nationals (n = 303), and 19.9 percent to other foreign nationals (n = 298).



The dissatisfaction with waiting time for government housing expressed by a majority of respondents in all three Service samples suggests shortages of housing units. Written comments from enlisted personnel addressed shortages of on-post government family housing. The following written comments, the first by a Navy respondent and the second by an Air Force respondent, illustrate the frustrations with respect to these shortages.

1. The housing in Yokosuka is criminally inadequate with waiting periods of 18-24 months. It would be better if it would be unaccompanied then families would not have to live in substandard housing (very cold in winter). Housing, a 30-45 minute drive from the base, over 60 percent of all families have to live off-base. (Navy E-4)

2. Time on station should be the basis for housing waiting lists instead of rank. I don't think it's fair for 1 or 2 years should be bumped back on the list by a newly arrived E-5 or E-6. We're all people! (Air Force E-3)

Permanent family housing was among the three most serious problems of service members in all Services and the most serious problem in the Navy and Marine Corps samples. Family housing also was selected overwhelmingly by all pay grade groups as the most important improvement needed in order to improve living conditions. One of the concerns of those reporting permanent housing as a serious problem and as an area needing improvement was probably the shortage of government housing. Service members who reported permanent housing as a problem and family housing as an area that needed improvement were more dissatisfied with the wait for government housing than those who did not select these alternatives. Negative feelings toward economy housing were also a factor in the reporting of permanent housing as a problem, with a slightly higher percentage of those in economy housing reporting the problem. However, a significantly higher percentage across all housing types selected this as one of their most serious problems. In general, those who reported permanent housing among their most serious problems were more dissatisfied with the overall comfort and adequacy of their residences and with various aspects of the residence than those who did not report it as a problem.

Other problems reported as serious across the three Services were initial housing costs and vehicles (shipping, insurance, inspection). The most frequently reported problem in the Air Force sample were vehicles. Initial housing costs (especially for those living in economy housing) were very high. Costs include up-front fees to realtors, fees for turning on utilities and telephone service, and first and last months' rent. These high costs can be very burdensome, especially to the lower pay grades, forcing some into poor quality Japanese economy quarters. Costly Japanese government safety inspection requirements also create both financial (buying and selling a car) and transportation problems, especially for those who have to or have chosen to live in economy housing. The following written comment from a Marine Corps respondent illustrates:

The monthly BAQ fully covers my monthly expenses for this reduced lifestyle. Initial expenses, however, were completely beyond my grasp without my wife first selling our car to cover everything. My initial cost to move into this "2 bedroom" apartment was over \$1,000. (Marine Corps O-2)

Other problems frequently reported among the most serious were language and cultural differences, temporary lodging, spouse employment, and shipping and storage of

function of the number of rooms, but the size of the rooms, especially in economy housing. The satisfaction with safety and security was reinforced by the data on the most serious problems. Only a very small percentage of individuals in all of the Services selected security as one of the three most serious problems they had encountered.

Overall satisfaction with one's residence was largely a function of satisfaction with the size of the residence. Much of the economy housing and some of the government housing is smaller than American standard. The importance of the residence size in satisfaction implies that new construction may be needed to increase overall satisfaction with residences.

Overall satisfaction with the adequacy and comfort of one's residence was statistically related to service member perception of the effects of living conditions on job performance, career intentions, and willingness to choose the present assignment again. The greater the satisfaction with the residence, the more likely the individual was to report positive effects of the living conditions. Living conditions seems to be, in large part, synonymous with satisfaction with one's residence.

An analysis of the satisfaction items showed that satisfaction is multidimensional. From the items analyzed, the five somewhat independent components of satisfaction that emerged included satisfaction with residence size; the condition and adequacy of household systems, furnishings, and costs; convenience of the residence to support facilities and services; the availability and convenience of recreational facilities for children; and the immediate physical/psychological surroundings of the residence (i.e., security, privacy, and appearance of the residence and neighborhood). Overall satisfaction was most closely associated with the size and physical/psychological dimensions. Thus, in all three Services, overall satisfaction was more a function of satisfaction with the size of the residence and the surroundings in which it is placed than of the other factors. These relationships between the dimensions of satisfaction and overall satisfaction have implications for planning and developing housing and communities for American military personnel on Japan/Okinawa.

Most service members who obtain economy housing use the services of the housing offices. In addition to offering referral services for economy housing, housing offices maintain waiting lists and make assignments to government housing. The housing office services were generally considered helpful by those respondents who used them, especially for the review of leases or rental agreements. However, several of the listed services were reported as either not provided or not used by a substantial proportion of the respondents. Transportation to inspect economy rentals was the service most often reported as not provided. Greater reporting of nonuse or lack of services was found in the Air Force and Marine Corps samples than in the Navy sample.

In the three Services, there was a relatively high level of dissatisfaction reported with listings of economy rentals provided by the housing offices. Dissatisfaction was highest with the number of listings and the size of the rental units available. One negative comment mentioned that all the housing office did was to maintain a list of generally substandard housing units that military people rent. The E-4 who made this comment went on to say, "There are good houses available, but without housing office assistance, you never hear of it." It may be that nonuse of housing office services is based on reputation or previous bad experiences rather than lack of need for those services. On the other hand, there was a relatively high level of satisfaction with the convenience of the available rentals to the post, base, or duty station.

Preference for government-owned housing was almost unanimous among those in government-owned housing and among a majority of residents of economy and other types. Government-owned temporary lodging was also highly preferred to other types.

In all three Services, a majority of respondents expressed overall satisfaction with the adequacy and comfort of their permanent residence. With the single exception of the Air Force E-1 to E-3s, no more than 31 percent of any pay grade group expressed dissatisfaction with overall adequacy and comfort. Pay grade was not related to overall satisfaction.

On the other hand, type of housing had a statistically strong relationship to overall satisfaction across the three Services. Consistent with the majority preferences for government-owned housing, residents of government-owned housing reported greater overall satisfaction with their permanent and temporary housing than those living in economy housing. In addition, they reported greater satisfaction with almost all of the 31 specific aspects of the residence (e.g., size, convenience, operating systems of the residence, costs, appearance, and security). The following written comment from an Air Force officer illustrates some of the negative aspects of economy housing:

I regard housing in my situation to be an abomination. Utilities constantly malfunction, the apartment is dreadfully small, with no yard for my children or pets, no adequate playground in the area, and no storage space. (Air Force O-3)

Service members also complained about expenses, problems with the use of kerosene heaters, poor insulation, the high cost of utilities and telephone service.

The aspects of one's housing, facilities, and services for which the most dissatisfaction was expressed were the size of the residence (overall size, bedroom size, and living/dining room size); the heating system; and the quality (condition) of government furniture. This comment from a Navy enlisted respondent illustrates both the negative and positive aspects of living in economy housing in Japan:

The off-base housing is cold, cramped, drafty, dirty, and thin-walled; no real play areas for children and generally difficult to live in. In addition the kerosene heaters are dangerous; the risks of fire, asphyxiation, and burns from the exposed metal are too great to be acceptable to us. Otherwise we would prefer to live off-base since the local residents seem to be more friendly, courteous, and hospitable, with little or no theft, vandalism, or neighborhood bullies to pick on other children. (Navy E-6)

Service members with children showed relatively high dissatisfaction with the availability and convenience of the residence to recreational facilities for children. Several respondents commented on the lack of activities for youth, boredom among teenagers, and lack of facilities.

Of the 31 different aspects of satisfaction with housing, facilities, and services measured, the greatest amount of expressed satisfaction (across the three services) was with personal safety and security, convenience to the installation and government facilities, hot water, operating condition of kitchen appliances, the electrical service (although expensive in economy housing), and the number of bedrooms. The latter finding is interesting because it suggests that dissatisfaction with housing unit size is not a

### Explaining the Perceived Living Condition Effects

Looking for clues to the perception of the effects of living conditions, a group of variables believed to represent factors related to these conditions were selected for inclusion in the multiple regression analysis. They included demographic characteristics, time factors, perceived effects of and satisfaction with temporary housing, satisfaction with the housing office, characteristics of the residence, spouse and dependent transportation, and overall satisfaction with the current residence.

Aggregated across all three Services, service member overall satisfaction with the adequacy and comfort of the permanent residence showed the highest relationships (among the variables selected above) to perceived effects of living conditions on job performance and on military career intentions. The relationships were positive; that is, the higher the satisfaction the more likely the perceived effects were seen as positive.

Effects of experiences in temporary housing on attitude toward living in a foreign location, along with overall satisfaction with the residence showed the highest relationships to service member willingness to choose the present assignment over again. The relationships were positive; that is, a worsened attitude toward living in a foreign location as a result of the temporary lodging experience was more likely to result in unwillingness to choose the present assignment again. Similarly, the higher the satisfaction with the current permanent residence, the more likely the willingness to choose the present assignment again.

Relationships mentioned above ranged from .34 to .46, measured by correlation coefficients. Since a perfect relationship is 1.00, this indicates low but statistically reliable associations.

### **DISCUSSION**

The discussion will focus, except where noted, on accompanied service members in the Navy, Air Force, and Marine Corps in Japan/Okinawa.

The samples consisted largely of individuals in the E-4 to E-6 and E-7 to E-9 pay grade groups in all three Services. The junior enlisted grades (E-1 to E-3) were underrepresented in all Services, as were the E-4 to E-6 group in the Marine Corps. Higher pay grades were overrepresented in terms of the original numbers to whom the questionnaire was sent. The respondents were a highly career motivated group with a very large majority in each Service reporting they intended to remain in the Service for 20 years. There were very few female service members in the sample. A substantial percentage of the spouses in each Service were foreign nationals, many of whom were Japanese. The large majority of the accompanied individuals had children living with them. In the Marine Corps, almost half of the respondents had dependents, but were currently unaccompanied. The low rate of return for the lower enlisted grades may have biased some of the results presented for the entire sample, since the responses on several areas of the survey showed differences between the junior enlisted group and all or some of the other pay grade groups.

The majority of service members in each Service (55 to 80%) reported living in government-owned housing. Almost all of the other respondents lived in economy housing with a very small percentage living in government-leased or some other type of housing. There was a strong preference for government-owned housing in all three Services.

## Differences by Pay Grade Group, Housing Type, and Household Composition

### Navy

Pay grade group was weakly related to perceived effects of living conditions on both job performance and military career intentions. Officers were slightly more positive than enlisted personnel. With respect to choosing their present assignment again, the senior enlisted (E-7 to E-9) and all officer groups were, on the average, more positive than the E-1 to E-6 groups.

Compared to those in economy housing, residents of government-owned housing were somewhat more positive in their perceptions of the effects of living conditions on job performance, career intentions and willingness to choose their present assignment again.

The presence or absence of children in the households was not related to any of the three variables.

### Air Force

Pay grade showed stronger effects in the Air Force than in the other two Services. The E-1 to E-3 group reported more negative effects of living conditions and less willingness to choose their present assignment over than the other pay grade groups. The E-7 to E-9 group and the officers were more positive about choosing the present assignment again than were the E-1 to E-6 groups. The E-4 to E-6 group was more positive than the E-1 to E-3 group.

As in the other Services, residents of government-owned housing who perceived an effect of living conditions on job performance and military career intentions were more likely to report positive effects than those in economy housing. They were also more likely to be willing to choose their present assignment again.

Presence or absence of children was not related to perceived effects of living conditions on job performance nor on willingness to choose the present assignment again. Those without children were slightly more negative in their perceptions of the effects of living conditions on their career intentions than those with children.

### Marine Corps

As in the Navy sample, the relationships of pay grade group to effects on job performance and military career intentions were very small. Choice of present assignment again was most positive in the E-7 to E-9 and W-1 to W-4 pay grades with the E-1 to E-3 respondents least positive compared to other pay grade groups.

Residents of government-owned housing were slightly more positive as to the perceived effects of living conditions on both job performance and career intentions and more strongly positive about choosing their present assignment than those in economy housing.

Service members with children living with them did not differ from those without children on any of the three variables.

Table J-55  
Responses to Living Conditions Effects Questions (Q137-Q139)

Question	Responses (%)						
	Navy		Air Force		Marine Corps		Total
	Enlisted	Officer	Enlisted	Officer	Enlisted	Officer	Officer
Q137: Which best describes the effect that living conditions on this tour have had on your job performance?							
Negative	(n = 890)	(n = 616)	(n = 1192)	(n = 497)	(n = 503)	(n = 411)	(n = 1524)
No effect	26.3	25.8	27.9	24.1	23.3	24.1	24.8
Positive	49.2	39.6	47.1	35.2	51.7	47.7	40.4
	24.5	34.6	25.0	40.6	25.0	28.2	34.8
Q138: Which best describes the effect that living conditions on this tour have had on your career intentions?							
Negative	(n = 891)	(n = 616)	(n = 1193)	(n = 497)	(n = 503)	(n = 411)	(n = 1524)
No effect	20.9	17.9	21.9	13.5	19.9	17.0	16.2
Positive	57.2	56.2	58.4	61.0	58.8	63.5	59.7
	21.9	26.0	19.7	25.6	21.3	19.5	24.1
Q139: Relative to living conditions, if you had a choice and you had it to do over, would you choose your present assignment?							
No	(n = 891)	(n = 613)	(n = 1192)	(n = 494)	(n = 503)	(n = 412)	(n = 1519)
Unsure	27.3	24.5	33.4	22.1	26.8	26.9	24.3
Yes	8.1	5.1	9.6	4.3	8.0	5.6	4.9
	64.6	70.5	57.0	73.7	65.2	67.5	70.7

Living Condition Impacts (Q137-Q139). The unaccompanied Marine Corps respondents were slightly more likely to be undecided about a military career (13.2%) compared to the accompanied respondents (7.7%). They were also more likely to report negative effects of living conditions on both their job performance and their career intention (31 to 34% by pay grade) than the accompanied (19 to 24%). The best predictors of the unaccompanied respondents' perception of impact of living conditions on job performance were overall satisfaction with the current residence, the effect of the unaccompanied status on job performance, and their basic career intentions ( $R = .50$ ). Similarly, basic career intention, overall satisfaction with the current residence, and the effect of being unaccompanied on job performance (in combination) best predicted the perceived effect of living conditions on career intention ( $R = .41$ ). It should be noted again that these combinations of variables are only moderately predictive.

Policy Proposals (Q127-Q136). A majority of the unaccompanied respondents favored the policy proposals that provided for the unconditional extension of eligibility for government housing to E-1 to E-3s and E-4s with less than 2 years of service (70.5% in favor), for assignment solely on the basis of bedroom requirements (69% in favor), and for construction of E-1 to E-3 housing without impacts on others (63.8% in favor). Like their accompanied counterparts, they were generally opposed to the proposals that included potential negative impacts, such as increasing waiting time (54.9% opposed) and causing construction delays (55.1% opposed), and to retention of the current housing assignment procedures (59.3% opposed).

Regarding the proposals affecting choice and allowances in government housing, they were most in favor of a maintenance allowance (71.7%), followed by the proposal allowing government housing occupants to choose to have fewer bedrooms and keep some of their BAQ (69.1%) and the utility allowance proposal (54.4%). The least popular proposal (59.4% opposed) would allow government housing occupants to pay beyond their BAQ (out-of-pocket) for more bedrooms than they were qualified to have.

### PERCEIVED EFFECTS OF LIVING CONDITIONS

One purpose of this study was to assess the effects of living conditions on military readiness and retention. The survey did not directly measure readiness or retention. However, in order to obtain information related to these topics, the questionnaire asked the respondents to evaluate what effects the living conditions on this tour (defined as housing, support facilities, costs, transportation, etc.) had on their job performance and military career intentions. Job performance may be considered as one component of readiness and career intention as an indicator of potential retention.

Table J-55 presents service member's perceptions of the effects of living conditions.

The three Services were very similar in the distribution of responses. The largest percentage of respondents believed that living conditions had no effect on their job performance or military career intentions. Somewhat higher percentages believed living conditions had no effect on their career intentions than on job performance. This may be partly due to the presence of 20 year or more service members in the sample.

In general, service members in the three Services were also positive about their present assignment, as measured by their willingness to do it over again, considering the living conditions.

### Respondents Preferring to Leave the Service (Excluding those who had Already Served 20 Years or More)

Only 5.7 percent of the Marine Corps sample (n = 52) indicated a preference for leaving the Service after completion of the current tour. These individuals were found mostly in the E-1 to E-3 and E-7 to E-9 pay grade groups. They were more likely to report initial housing costs as a serious problem (54.3%) than those not preferring to leave (34%) and were somewhat more dissatisfied with their residences (37.3%) than the others (28.9%). They more often reported not having a sponsor (58.2%) than those not preferring to leave (46.7%). They were also much more likely to report negative effects of living conditions on their job performance and career intentions (57 to 58% by pay grade group) than their comparison group (24 to 29%).

### Unaccompanied Respondents

Demographics. A very large percentage of the Marine Corps sample were unaccompanied (44.4%, N = 736). Compared to the accompanied group, they were overrepresented in the E-1 to E-6 pay grades and underrepresented in the O-1 to O-3 pay grades. They were much more likely to have dependent children and relatives, but no spouses (8%), than the accompanied (0.9%). Nearly all (90.9%) lived in barracks, with the remainder in economy or other types of housing. However, less than half (45.8%) preferred barracks and 25.6 percent preferred economy housing.

Reasons for Being Unaccompanied (Q24-Q26). As to reasons given for being unaccompanied, 60.6 percent of the respondents reported reasons beyond their control (e.g., dependents not command sponsored, high cost of relocation); 24.3 percent reported dependent situations (e.g., spouse job, poor timing for dependents to move); 7.7 percent reported the reason as their own choice; and 7.3 percent said other (unspecified). On a separate item, 59.4 percent said they wanted their dependents to accompany them, 14 percent had mixed feelings, and 26.6 percent preferred their dependents to remain in CONUS.

Impact of Being Unaccompanied on Job Performance (Q28). A large percentage of respondents (47.9%) reported their status had no impact on their job performance. However, 37.4 percent said they were less effective because of being unaccompanied, and 14.7 percent said they were more effective. The combination of variables that best predicted the respondents' perceived impact of their status on job performance included whether or not they preferred to be accompanied, their perceived effect of living conditions on their job performance, their pay grade level, and whether or not they would now choose the tour ( $R = .46$ ). Reporting of negative effects of the unaccompanied status on job performance, then, is associated with wanting to be accompanied, perception of living conditions having a negative impact on job performance, lower pay grade (enlisted), and general negativity toward the current tour. The opposites of these variables would then be moderately associated with perception of more positive impacts of the unaccompanied status on job performance.

Problems (Q140-Q142)/Improvements Needed (Q123-Q126). The most serious problems of the unaccompanied were separation (72.7%) and language and cultural differences (35.0%). The most important improvement needed was troop barracks (67.9%) followed by family housing (53.8%), work areas (39.7%), family entertainment facilities (36.3%), and commissaries (36.3%). Over 80 percent of the unaccompanied reported not having had a sponsor, compared to about 24 percent of the accompanied respondents.



### Comparison by Spouse Nationalities

The large majority of the respondents were married to U.S. born spouses (72.9% of the sample, n = 665); 17.8 percent were married to local national spouses (n = 162); and 9.3 percent were married to other foreign national spouses (n = 85). Nearly half of the local national spouses (45.1%) were married to E-7 to E-9s, and nearly half (44.7%) of the other foreign national spouses were married to E-4 to E-6s. No differences were found in current type of housing or in housing preferences. Spouse reliance on the service member for transportation was higher among local (25.2%) and other foreign nationals (26.3%) than among U.S. born spouses (15.7%). The most serious problems reported by respondents with local national spouses were vehicles, initial housing costs, and shipping and storage of household goods. The most serious problems of respondents with other foreign national spouses were permanent housing and vehicles. Among those married to U.S. born spouses, the most serious problem was permanent housing.

Reflecting the preponderance of local national spouses married to senior enlisted personnel, these service members more often than others had already served 20 years or more in the military. Also, they were more likely to prefer extensions or second tours in the present location or country. As in the Navy sample, those with other foreign national spouses more often preferred a second tour in another foreign country, and those with U.S. spouses more often preferred to return to CONUS.

### Respondents Accompanied by Nonsponsored Dependents

Nearly one-quarter of the Marine Corps sample (22.1%, n = 263) were accompanied by nonsponsored dependents. These individuals were overrepresented in the E-1 to E-6 pay grade groups and underrepresented in the E-7 to E-9 and W-1 to W-4 pay grade groups. Approximately 15 percent had changed marital status since arrival at the current post, base, or duty station, compared to 4.5 percent of those with sponsored dependents, and more of the nonsponsored group than the sponsored group had no children.

Nearly all of the nonsponsored group (95.5%) lived in economy or other housing; however, only 42.5 percent preferred this housing, with 57.5 percent preferring government. Respondents with nonsponsored dependents were much more likely to express dissatisfaction with their residences (40.4%) than their sponsored counterparts (24.2%). Similarly, their spouses were perceived to be more dissatisfied with their residences (47.7%) than sponsored spouses (29.3%). Respondents with nonsponsored dependents more often reported transportation problems (45.9%) than their comparison group (28.2%), and they reported greater reliance of their spouses on them for transportation (34.4% compared to 13.7% of the sponsored dependent group).

Personnel accompanied by nonsponsored dependents were more often negative or uncertain about making the military a career (30.7%) than their comparison group (8.9%). They were more likely to report a negative effect of living conditions on career intention (30.7%) compared to those with sponsored families (15.2%), and nearly twice as likely to say they would not now choose the tour (41.6%) than those with sponsored families (22.7%). Over half (53.4%) of the respondents with nonsponsored dependents reported not having a sponsor, compared to 15.6 percent of the others.

combination of variables that best predicted perceived effect of being unaccompanied on job performance included whether or not they preferred to be accompanied, whether or not they would now choose the tour, if they perceived a positive or negative effect of living conditions on their job performance, their current type of housing, their pay grade level, and their overall satisfaction with their current residence ( $R = .65$ ). The negative or low end of the scale on all of these variables would then be associated with perceived negative impacts on job performance, while the high or positive end would be associated with positive impacts on job performance.

Problems (Q140-Q142)/Improvements Needed (Q123-Q126). The unaccompanied respondents most often reported serious problems with separation (48.3%) and vehicles (35.0%), and they selected both barracks (60.0%) and family housing (47.1%) as the most important areas needing improvement. The unaccompanied were somewhat more likely to report not having a sponsor (12.3%) than their accompanied counterparts (4.9%).

Living Condition Impacts (Q137-Q139). The unaccompanied were somewhat more likely to report being dissatisfied with the overall comfort and adequacy of their residences (33.8%) than the accompanied (23.8%). The best predictors of their perceived living condition impact on job performance were their satisfaction level with the current residence, their current type of housing, their perceived effect of being unaccompanied on job performance, and whether or not they preferred to be accompanied ( $R = .58$ ). The living condition effect on career intention could not be predicted from the variables to even a moderate extent.

Policy Proposals (Q127-Q136). Of the policy proposals that affected assignment to government housing, the most popular was the construction of family housing for E-1 to E-3 and E-4 personnel with less than 2 years of service (73.5% in favor). Following closely was the unconditional extension of eligibility to the E-1 to E-3 and E-4s (72.6% in favor). Still popular, but considerably less so, was the proposal to assign government housing solely on the basis of bedroom requirements (59.8%). Votes on the two proposals that included potentially negative impacts on others (i.e., construction delays and increased waiting times) were generally split between pro and con. The most unpopular of the proposals was the retention of current assignment procedures (64.2% opposed).

Of the policy proposals that affected choice and allowances in government housing, a majority (64.3%) favored the maintenance allowance proposal, the proposal permitting choice of fewer bedrooms in exchange for retention of some of the BAQ (63.3%), and the utility allowance proposal (54.8%). The most unpopular proposal was to allow government housing occupants to pay additional money (beyond their BAQ) for units with more bedrooms than they were qualified to have (65.4% opposed).

## Marine Corps

### Accompanied Female Service Members

Accompanied female service members made up only 1.6 percent of the sample ( $n = 15$ ). No analysis was possible.

### Accompanied Single Parents

Single parents represented only 0.9 percent of the sample ( $n = 9$ ).

than those with U.S. born (38.6%) and other foreign national spouses (41.2%). U.S. born and other foreign national spouses were also more often employed (34 to 35%) than local national spouses (13.8%).

Respondents with local national spouses were somewhat more likely than others to report serious problems with vehicles and shipping/storage of household goods. Negative effects of living conditions on job performance and career intentions were more often reported by respondents with U.S. spouses (24 to 30%) than by those with local or other foreign national spouses (10 to 21%).

#### Respondents Accompanied by Nonsponsored Dependents

Only 1.3 percent of the sample reported having nonsponsored dependents living with them (n = 22).

#### Respondents Preferring to Leave the Service (Excluding those who had Already Served 20 Years or More)

As the Navy sample, the Air Force sample was highly career motivated. Only 6.1 percent (n = 103) indicated a preference for leaving the Service after completion of the current tour. Compared to those not desiring to leave, those preferring to leave were overrepresented in the E-7 to E-9 pay grades.

They were more likely to report dependent transportation problems (41.2%) than those intending to stay (24.8%), and more likely to report spouse reliance on them for transportation (36.9%) than the others (21%). They much more often reported a negative effect of living conditions on their career intention (44.1%) than those intending to stay (19.9%) and were somewhat more likely to be negative toward the tour (i.e., 45.1% would not now choose the tour) compared to the others (31.9%). Unlike those preferring to stay, they were also more likely to report serious problems with vehicles, shipping and storage of household goods, and working conditions.

#### Unaccompanied Respondents

**Demographics.** Only a small percentage of the Air Force sample was unaccompanied (5.1%, n = 91). They were most underrepresented in the 04 to 06 pay grade group and were frequently separated, divorced, or widowed (29.7%). They more often had children and relatives as dependents, but no spouses (23.3%) than the accompanied (1.8%). Nearly three-quarters (72.3%) lived in barracks, 21.7 percent in economy housing. However, only 44.6 percent preferred barracks, while 32.5 percent preferred economy housing. The large majority (92.1%) were permanently unaccompanied.

**Reasons for Being Unaccompanied (Q24-Q26).** When asked why they were unaccompanied, 35 percent reported dependent-related situations (e.g., spouse job, dependents settling); 32.1 percent gave reasons beyond their control (e.g., high cost of relocation, dependents not command sponsored); 20.4 percent did not specify a reason (other); and 12.5 percent gave their reason as personal preference. On a separate item, 44.9 percent said they wanted their dependents with them, 23.6 percent had mixed feelings, and 31.5 percent preferred their dependents to remain in CONUS.

**Impact of Being Unaccompanied on Job Performance (Q28).** The majority (51.7%) reported no impact of their status on their job performance, while nearly equal percentages felt they were less effective (27%) and more effective (21.3%). The

assignment procedures was generally opposed (by 64.4%), as was the proposal to construct E-1 to E-4 housing with the potential impact of delaying construction of all other housing (by 56.4%). The proposal to extend eligibility to the E-1 to E-4s, with the potential of increasing waiting time for everyone, was nearly equally favored (46.8%) and opposed (43.9%).

Among the unaccompanied respondents, the most popular of the proposals affecting choice and allowances in government housing was the maintenance allowance, with 76.6 percent in favor. Next, the most popular was the proposal allowing occupants to keep part of their BAQ for choosing to live in a residence with fewer bedrooms than they were qualified to have (68.8% in favor). The utility allowance proposal was favored by 52.9 percent. Most unpopular was the proposal allowing out-of-pocket payment beyond the BAQ for housing with more bedrooms than the individual would be qualified to have (56.6% opposed).

### Air Force

#### Accompanied Female Service Members

Accompanied female service members were only 4.2 percent of the Air Force sample (n = 71). Compared to males, they were overrepresented in the E-4 to E-6 and O-1 to O-3 pay grades. They were more often separated, widowed, or divorced (14.1%) than males (1.2%) and more often had changed marital status since arrival at the current post, base, or duty station (28.2%) than males (6.8%). They were more likely to be single parents (15.7%) than males (1.2%), and one-third of the female service members were members of dual career couples. They more often lived in economy housing (33.8%) than males (18.3%) and were more likely to be sharing living expenses with persons other than dependents. However, they shared a strong preference for government housing (82.4%) with their male counterparts (88.5%).

Female service members were more likely to be undecided or negative about a military career (31.4%) than males (17.2%). They more often than males reported serious problems with language and cultural differences and initial housing costs, and selected temporary housing, work areas, and commissaries as areas needing improvement at their current post, base, or duty stations.

#### Accompanied Single Parents

Only 1.8 percent of the Air Force sample were accompanied single parents (n = 31). Compared to married parents, they were overrepresented in the E-4 to E-6 pay grades. Most were currently separated, divorced, or widowed (83.9%), with 12.9 percent single (never married).

#### Comparisons by Spouse Nationalities

Over two-thirds of the sample (69.7%) were married to U.S. born individuals (n = 1, 163), while 14.9 percent had local national spouses (n = 248) and 15.4 percent were married to other foreign nationals (n = 257). Local national spouses were found most often in the E-7 to E-9 pay grades, other foreign national spouses in the E-4 to E-9 pay grades. Those with local national spouses were only slightly more likely to be living in and to prefer economy housing than the comparison groups, but they did generally report less reliance on government facilities than the others. Respondents with local national spouses more often reported their spouses as unemployed and not looking for work (55.2%)

unaccompanied (86.4%). The majority of the unaccompanied (73.3%) lived in barracks, with 17.0 percent in economy housing. However, only 44.4 percent preferred barracks accommodations.

Reasons for Being Unaccompanied (Q24-Q26). As to why they were currently unaccompanied, 41.3 percent reported reasons beyond their control (e.g., dependents not command sponsored, service member schedule); 28.4 percent reported dependent situations (e.g., spouse job, poor timing for dependents to leave); and 19 percent reported other reasons (unspecified). Only 9.5 percent gave the reason as their own preference. In response to a separate question, however 30.4 percent reported they did not want their dependents to accompany them, while 20.7 percent had mixed feelings, and 48.8 percent wanted their dependents with them.

Impact of Being Unaccompanied on Job Performance (Q28). The largest percentage (46.6%) reported no impact of their status on job performance, while 35.6 percent felt they were less effective and 17.8 percent felt they were more effective. Regression analysis to determine the combination of variables that would best predict the perceived impact of the unaccompanied status on job performance showed a moderate prediction ( $R = .46$ ) based on general attitude toward the present assignment (i.e., whether or not it would be chosen now), preference for being accompanied or unaccompanied, pay grade group, months at the present duty station and months unaccompanied. Thus, those who reported negative impacts of their unaccompanied status on job performance were unlikely to choose the present assignment over, tended to prefer having their dependents with them, were in the lower pay grades (enlisted), had spent less time at the current duty station, and had been unaccompanied for a shorter period of time. Conversely, the opposites of these variables would be associated with more positive impacts being reported.

Problems (Q140-Q142)/Improvements Needed (Q123-Q126). The most serious problems reported by the unaccompanied were separation (65.6%), language and cultural differences (35.9%), and living expenses (22.7%). The most important improvements selected for the present base were troop barracks (50.4%), family housing (49.6%), exchanges (41.8%), recreation facilities (39.6%), and family entertainment facilities (36.1%). Approximately three times as great a proportion of unaccompanied (38.2%) as accompanied respondents (12.4%) reported having no sponsor.

Living Condition Impacts (Q137-Q139). The unaccompanied were more likely (35 to 41% by pay grade group) than their accompanied counterparts (26 to 30%) to report negative impacts of living conditions on their career intentions and job performance. Also, they were nearly twice as likely (47.2%) to say they would not now choose the tour than were the accompanied (26.4%). The two best predictors of living condition impact on job performance among the unaccompanied were service member overall satisfaction with the residence and the effect of the unaccompanied status on job performance ( $R = .39$ ). The same variables plus the number of months at the present duty station were also the best predictors of perceived impact of living conditions on career intentions ( $R = .40$ ). The predictive value of these variables, however is only moderate.

Policy Proposals (Q127-Q136). The unaccompanied Navy respondents' opinions of the policy proposals were very similar to the accompanied respondents'. The most popular housing assignment proposal was the unconditional extension of eligibility for government housing to E-1 to E-3s and E-4s with less than 2 years of service (69% in favor), followed by construction of housing specifically for the E-1 to E-4s (63.2% in favor) and assignment based solely on bedroom requirements (58.4% in favor). The proposal to retain current

Local national spouses were most often found among the E-7 to E-9 respondents and other foreign national spouses among the E-4 to E-9 respondents. Local national spouses were most often reported as unemployed and not looking for work (65.1%), while other foreign national and U.S. born spouses were more likely to be looking for work or to be employed.

Service members married to local nationals were more likely to live in economy housing than the comparison groups. However, preference for government-owned housing was consistently high (70 to 86.5%), regardless of the spouse nationality. Higher reliance on the service member for transportation was found among local (20.3%) and other foreign national spouses (22.3%) than among those married to U.S. born spouses (12.3%). Respondents married to local nationals more often reported a serious problem with vehicles; those with other foreign national spouses reported initial housing costs as being a problem; and those with U.S. born spouses reported language and cultural difference problems. In general, respondents with local national spouses reported less reliance on U.S. government facilities than the other groups.

Service members with local national spouses had more often already served 20 years or more in the military (42.7%) compared to 14.8 percent with U.S. born spouses and 15.8 percent with other foreign national spouses. They were also more likely to prefer extension or second tours in the present location or country. Those married to other foreign national preferred second tours in different foreign countries. Those married to U.S. born spouses preferred to return to CONUS.

Reports of negative effects of living conditions on job performance and career intention, as well as general negativity toward the current tour, were generally lower among respondents with local national spouses (13 to 16% negative) compared to approximately 23 to 31 percent with other foreign national and U.S. born spouses.

#### Respondents Accompanied by Nonsponsored Dependents

Only 1.7 percent of the sample fell into this special group (n = 26). This sample size did not permit analysis.

#### Respondents Preferring to Leave the Service (Excluding those who had Already Served 20 Years or More)

The sample was highly career motivated. Only 5.9 percent of the respondents (n = 88) indicated a preference for leaving the Service after the current tour. This preference was found mostly in the E-1 to E-6 pay grades. Those preferring to leave were frequently female and more likely to have changed marital status since arriving at the current post, base, or duty station (22.2%) than those not preferring to leave (12.9%). Those preferring to leave were twice as likely to report a negative effect of living conditions on career intentions (43.7%) than those not preferring to leave (22.7%) and more likely to be generally negative about the current tour (45.1%) than the others (30.5%).

#### Unaccompanied Respondents

Demographics. The unaccompanied group was also relatively small (12.9% of the sample, n = 221). They were overrepresented in the E-1 to E-3 pay grades. Almost 20 percent of the unaccompanied were divorced, separated, or widowed, compared to just 1 percent of the accompanied respondents. The unaccompanied were less likely to be married to local nationals and more often had children and relatives as dependents, but no spouses (18.9%) than did those who were accompanied (1.4%). Most were permanently

household goods. Examples of problems with temporary lodgings that were expressed in the write-in comments were locations too remote to enable service members to look for permanent housing, small size, uncleanness, being forced to move several times because the time given to find permanent housing was inadequate, and housing shortages. The quantitative data showed that people were most dissatisfied with the size of temporary lodgings. Residents of government-owned temporary lodgings were more satisfied with the overall comfort and adequacy of the quarters, as well as more satisfied with several aspects of the quarters (e.g., convenience, costs, size) than those who occupied economy temporary lodgings. Temporary lodging was also selected among the most important improvements needed by all three Services.

Locally imposed weight limitations on personal effects shipped to Japan can create problems with having to sell possessions before relocating and with having to purchase new furnishings afterwards. The small size of the economy homes also greatly limits the amount of storage space for personal and household possessions.

In addition to family housing and temporary lodging, medical facilities were frequently selected as needing improvement by all three Services. After these top three, however, there were differences between Services. Commissaries and youth recreation facilities were selected next by Navy respondents; parking facilities and work areas were selected next by the Air Force respondents; and commissaries and troop barracks were selected next by the Marine Corps respondents. Most of the unaccompanied Marine Corps members were living in barracks, and this probably accounted for the frequent choice of troop barracks as an area needing improvement.

Service members in all three samples were in favor of extending eligibility and constructing family housing for the pay grades now ineligible. As mentioned earlier, the write-in comments suggested that *service members want more government housing*. As would be anticipated, lower enlisted respondents were more in favor of these proposals than others, but almost all pay grade groups in each Service showed a higher percentage in favor than opposed. Attaching negative consequences to the eligibility extension and to construction of family housing for the lower pay grades (i.e., longer waiting times for government housing, delays in construction of other housing) sharply decreased the level of support and increased the percentage opposed in all pay grade groups. Most pay grade groups were opposed to the two proposals under these circumstances. The results suggest that self-interest and limited government housing assets are the predominant influences on opinions toward the extension and construction proposals for those not now in competition for the housing resources.

Majorities in all Services were in favor of assigning housing solely on the basis of bedroom requirements while retaining designated officer and enlisted housing. A majority in each Service opposed the proposal for no change in housing assignment policy. Support for proposals to extend eligibility and construct family housing for the lower pay grades (without negative consequences) suggests dissatisfaction with current policy and amenability to change.

Proposals to allow retaining part of the BAQ in exchange for fewer bedrooms and to provide an allowance for doing minor repairs to the housing unit also received majority approval. A majority were opposed to the proposal to allow "buying" more bedrooms by paying more than the BAQ. The utility allowance proposal showed approximately equal percentages in favor and opposed.

Service members married to local national spouses did not show strong differences from those with American spouses on satisfaction with various aspects of housing. Those

with local national spouses tended to be males and in the senior enlisted pay grades. They tended to report vehicle problems more often than those with U.S. born or other foreign spouses.

Service members having nonsponsored dependents with them (almost all were Marine Corps members) expressed a range of attitudes that were more negative than those whose dependents were command sponsored. Perhaps of prime significance, almost all of those with nonsponsored dependents lived in economy housing. They expressed more dissatisfaction with their residence, more often reported problems with transportation, were more negative or uncertain about making the military a career, were more likely to report a negative effect of living conditions on career intentions, and were less willing to choose the present assignment again than those whose dependents were sponsored. It is likely that the lack of government family housing on Okinawa was the cause for many of these families not being sponsored. Having unsponsored dependents apparently creates additional hardships for the service member and family. This should be remembered in considering changes in housing and sponsorship policies.

Some negative effects were also found to be associated with unaccompanied status. The majority of the unaccompanied reported a preference for being accompanied. In the Marine Corps sample (containing the largest percentage of unaccompanied respondents), most lived in barracks, but less than half preferred that type of housing. Over one-third expressed the feeling that they were less effective in their job performance as a result of their unaccompanied status. They were more likely to report negative effects of living conditions on their job performance and military career intentions than were accompanied service members. The most frequently reported problem was separation due to the unaccompanied status. The most frequently selected area for improvement was troop barracks (Marine Corps sample). Again, there is some evidence that unaccompanied status is associated with perceived negative effects. Possible solutions involve more government housing. The following written comment from a Marine Corps enlistee illustrates the family separation problem:

Prolonged family separation is one of the biggest reasons many persons leave the service. Personally, I regard my duties to my family as a husband and father to be infinitely more significant than any career. The primary reason my family cannot join me at my present duty station is the great expense of transportation on top of the expense of starting a new household. Many service members would bear the burden of added household expenses if they could just get their families to join them at a reasonable cost. I believe this would increase morale, productivity, and enhance retention of quality personnel. (Marine Corps E-5)

Among the accompanied service members, close to half perceived that living conditions had an effect on their job performance. The effects were slightly more positive than negative. A smaller percentage perceived effects of living conditions on their military career intentions, with about an equal percentage reporting positive and negative effects. A majority in all services said that, considering their living conditions, they would choose their present assignment again. Members of the junior enlisted groups were less positive than others in their assessments of the effects of living conditions. Residents of government-owned housing were more positive than those living in economy housing.



## CONCLUSIONS

1. Serious problems reported in the three Services were initial housing costs (especially for the junior enlisted personnel and those in economy housing), prohibition on shipping of privately owned vehicles to Japan, language and cultural differences, and spouse employment.

2. There was a perceived need among the respondents in all three Services for construction, expansion, leasing, and renovation of family housing, temporary lodgings, and medical facilities.

3. The majority of respondents in all Services were living in government-owned housing at the time of the survey (70.4% Navy, 79.9% Air Force, 55.1% Marine Corps). Government-owned housing was preferred to other types of housing by almost all pay grade groups in the three Services.

4. Residents of government-owned housing were more satisfied than those in economy housing with the overall comfort and adequacy of their residences, as well as with 26 of the 31 specific aspects of their residences, facilities, and services that were measured.

5. Service members were generally not satisfied with temporary lodgings, especially those that occupied economy quarters. Temporary lodging was reported among the most serious problems and an area where improvement was needed.

6. There was general overall satisfaction with the current permanent residence in all Services and among almost all pay grade groups. Across Services, the greatest dissatisfaction expressed was with the size of the residence, heating systems (including lack of insulation), availability and quality of government furniture, and recreational facilities for children.

7. Overall satisfaction with the residence was the most important predictor of perceived effects of living conditions on job performance, military career intentions, and willingness to choose the present assignment again. More satisfaction with the residence led to a greater probability of perceived positive living conditions effects.

8. There was evidence that both having nonsponsored dependents living with the service member and being unaccompanied produced situations in which living conditions were perceived as having negative effects on job performance and military career intentions.

9. Across Services, the majority of respondents (51 to 72%) favored housing assignment proposals to extend eligibility to and/or construct family housing specifically for those families currently ineligible. Also popular was the proposal to assign government housing by bedroom requirement. Extension and construction proposals that included potential negative impacts, however, were generally opposed. A maintenance/repair allowance proposal and a proposal to allow retention of some of the BAQ in exchange for living in a unit with fewer bedrooms were favored by the majority of respondents (54 to 72%) across Services.

## RESULTS—KOREA (ARMY, AIR FORCE)

### PROFILE OF SAMPLES

Service members accompanied by dependents are the major focus of the presentation and analysis of the data. Separate analyses were conducted for unaccompanied service members who constituted large components of each service sample (54.8% in the Army and 45% in the Air Force). Results for the unaccompanied respondents are presented with special groups (p. 418). Unless noted otherwise, analyses in other sections are based on the responses of service members who are accompanied.

#### Demographic Characteristics

This section presents the demographic characteristics of the two Service samples, including data on both accompanied and unaccompanied service members.

#### Pay Grade

Table K-1<sup>8</sup> shows the distribution of pay grade groups by Service.

Over half of the accompanied respondents in the Army were officers, with the largest representation among the senior officers (O-4 to O-6). Among unaccompanied service members, the distribution by pay grade group was generally similar to that for the accompanied individuals, except for somewhat higher proportions in the E-1 to E-6 groups and warrant officers, and a substantially smaller proportion of senior officers. In the Air Force sample, there was a somewhat lower proportion of unaccompanied O-1 to O-3 respondents and a slightly higher proportion of E-4 to E-6 respondents in the unaccompanied sample compared to the accompanied.

In both Services and for both the accompanied and unaccompanied, there was an underrepresentation of the E-1 to E-3 group and an overrepresentation of the senior officers, especially among the accompanied in the Army. The O-1 to O-3 group was slightly overrepresented in the Army and underrepresented among the Air Force unaccompanied. The distribution of pay grades in these samples is, therefore, somewhat different from the actual distribution in the population.

Pay grades were grouped as shown in Table K-1 to facilitate analysis, presentation, and interpretation. It is of some interest, however, to note the distributions of individual pay grades within each pay grade group. For the accompanied Army sample the individual pay grade distributions were as follows: (1) There were no E-1s and almost all E-3s in the E-1 to E-3 group, (2) the E-4 to E-6 group was mainly E-5s and E-6s, (3) the E-7 to E-9 group consisted of two-thirds E-7s, (4) warrant officers were almost evenly divided between W-1 to W-2s and W-3 to W-4s, (5) the O-1 to O-3 group was 95 percent O-3s, and (6) the O-4 to O-6 group had a majority of O-4s (55%).

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<sup>8</sup>Prefix of table numbers identifies survey results by country: K = Korea.

Table K-1  
Pay Grade Group by Service (Q1-Q2)

Pay Grade	Army			Air Force			Total n	%
	Accomp. n	Accomp. %	Unaccomp. n	Accomp. n	Accomp. %	Unaccomp. n		
E-1 to E-3	16	2.2	64	17	4.3	19	116	4.9
E-4 to E-6	124	16.8	189	174	43.8	161	648	27.4
E-7 to E-9	166	22.4	194	101	25.4	81	542	23.0
W-1 to W-4	88	11.9	162	--	--	--	250	10.6
O-1 to O-3	101	13.6	143	40	10.1	18	302	12.8
O-4 to O-6	245	33.1	146	65	16.4	46	502	21.3
Total	740	100.0	898	397	100.0	325	2360	100.0

For the accompanied Air Force sample, the distribution of individual pay grades was as follows: (1) The E-1 to E-3 group was all E-3s, (2) the E-4 to E-6 group was mainly E-5s and E-6s, (3) the E-7 to E-9 group was predominately E-7s, (4) the O-1 to O-3 group was almost all O-3s, and (5) the O-4 to O-6 group was predominately O-4s and O-5s.

Among the unaccompanied, distributions by pay grades for each Service were similar, for the most part, to those found for accompanied service members. In the Army, there was a relatively even distribution of pay grades within the E-4 to E-6 group, and a greater proportion of W-3 to W-4s than W-1 to W-2s. In the Air Force sample, there were only minor differences between unaccompanied and accompanied sample in the distribution of pay grades.

#### Sex, Marital Status, and Spouse Nationality (Q3-Q6)

The very large majority of the respondents were male (98.4% in the Army, 99.7% in the Air Force). Reflecting how the sample was chosen, over 98 percent of each of the accompanied samples were currently married. Among the unaccompanied service members, 91.2 percent in the Army and 83.7 percent in the Air Force were currently married. Those not married were almost all divorced, separated, or widowed since arrival at their current post, base, or duty station. A high proportion (22.3%) of the accompanied Air Force sample were married to a different spouse or had married since arriving at the present installation.

Almost half of the accompanied Army service members (48.1%) were married to Korean nationals, while another 8.4 percent were married to other foreign nationals. In the Air Force sample, a large majority of the accompanied were married to foreign nationals (77.8%). It appears that in Korea, in the Air Force, and, to a lesser extent, in the Army, accompanied tours are for those married to foreign nationals, especially Koreans. Among the Army respondents, accompanied personnel in the E-4 to E-9 groups were more likely to be married to local nationals than were the other pay grades, with senior officers least likely to have foreign national spouses. Among accompanied Air Force respondents, a very high percentage (80%) of all enlisted groups were married to Koreans, while much smaller percentages of officers had foreign spouses. The very high proportion of service members married to local nationals, especially among the enlisted people, should be kept in mind while reading the results of analyses.

#### Household Composition and Dependents

Table K-2 shows the composition of the households by Service.

The very large majority of accompanied service members in each Service (76 to 88%) had households with children. Households with single parents and two service members were rare. A small percentage (close to 9%) in each Service had households with relatives other than spouses and children. Junior enlisted (E-1 to E-3) respondents were also less likely to have children than the other pay grade groups.<sup>9</sup>

Household Size (Q14)/Age of Children. The average number of live-in dependents was 2.7 for the Army and 2.3 for the Air Force. The greatest frequency (modal group) of dependents was three in the Army and two in the Air Force.

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<sup>9</sup> All references to the E-1 to E-3 group should be interpreted with caution as there are very few junior enlisted service members among the accompanied group in both Services (less than 20).

Table K-2  
Household Composition (Q7)

Composition	Army (%)		Air Force (%)	
	Accomp. (n = 738)	Unaccomp. (n = 898)	Accomp. (n = 396)	Unaccomp. (n = 324)
Without children	12.2	8.5	23.7	12.7
With children	87.8	91.5	76.3	87.3
Single parent households	0.3	1.6	1.0	4.0
Households with dependent relatives	8.8	9.8	8.6	12.4
Dual career households	1.2	1.0	0.5	3.7

Table K-3 presents the percent of service members who had children or other dependents in various age groups. Since the respondents frequently had children in more than one age group, the percentages do not add to 100 percent.

Table K-3  
Ages of Children (Q8-Q11)

Age Group	Army (%)		Air Force (%)	
	Accomp. (n = 722)	Unaccomp. (n = 898)	Accomp. (n = 390)	Unaccomp. (n = 325)
Q8: Children under 2	23.9	17.2	26.1	15.9
Q9: Children 2 to 5	33.3	31.9	35.4	29.6
Q10: Children 6 to 12	48.0	52.8	31.6	47.7
Q11: Children 13 to 18	31.5	34.5	20.3	33.8

Among accompanied respondents, the major difference in distribution of live-in dependent children between the two Services was the greater percentage of Army service members with children 6 years of age or older. In the Army sample, the largest percentage had children in the 6 to 12 year group (almost half). In the Air Force sample, the largest percentage had children in the 2 to 5 year group (35%). Approximately one-fourth in each Service had infants and approximately one-third had young children (2 to 5). Senior officers were most likely to have teenage children and children in the 6 to 12 year group. The E-4 to E-6 and O-1 to O-3 groups were most likely to have children in the youngest age group.

In the Army sample, the distribution of childrens' ages was similar for the accompanied and unaccompanied. For the Air Force, a lower percentage of the unaccompanied had infants (under 2) and very young children (2 to 5), while substantially higher percentages had children in the 6 to 12 and 13 to 18 year age groups.

Table K-4 shows the number of children in each age group.

Table K-4  
Number of Children in Each Age Group

Age Group	Army		Air Force		Total	
	n	%	n	%	n	%
Q8: Children under 2	188	14.2	114	20.1	302	16.0
Q9: Children 2 to 5	301	22.7	169	29.8	470	24.8
Q10: Children 6 to 12	514	38.8	173	30.6	687	36.3
Q11: Children 13 to 18	322	24.3	110	19.4	432	22.8
Total	1325	28.1	566	26.1	1891	27.1

Command Sponsorship of Dependents (Q13). A substantial percentage of the accompanied service members, 23 percent of the Army and 35.5 percent of the Air Force samples, had dependents who were not command sponsored. The E-1 to E-6 groups had the highest percentages of unsponsored dependents with them, while senior officers in both Services had almost no dependents who were not command sponsored. Comparisons of service members with and without command sponsorship for their live-in dependents are shown with special groups (p. 418).

#### Spouse Employment

Table K-5 shows, for accompanied service members, the percentages of respondents by their spouse's employment status in CONUS prior to the current tour of duty and currently in Korea.

A large majority of both Army and Air Force spouses were unemployed currently (70% in the Army and 85% in the Air Force). Most of the unemployed spouses were not looking for work.

Spouses of Army enlisted members and warrant officers were more likely to be unemployed and looking for work than spouses of commissioned officers. Spouses of the 0-1 to 0-6 groups in the Army were more likely than spouses of other pay grades to be employed. Differences among pay grade groups were not as clear in the Air Force sample. The E-7 to E-9 and officer groups in the Air Force sample were also more likely than the E-1 to E-6 groups to have working wives, but the differences were not as great as in the Army.

#### Family/Spouse Income (Q147-Q148)

Table K-6 shows the median family income for the previous month by pay grade group. Total family income generally reflects the increasing rank. However, representation of individual pay grades within the groups was unequal. This unequal representation affects the medians.

Table K-5

## Spouse Employment Status--Korea/CONUS (Q145-Q146)

Status	Army				Air Force				Total			
	Korea		CONUS		Korea		CONUS		Korea		CONUS	
	n	%	n	%	n	%	n	%	n	%	n	%
<u>Unemployed, not looking for work</u>												
E-1 to E-3	6	42.9	5	45.5	8	47.1	4	57.1	14	45.2	9	50.0
E-4 to E-6	68	55.3	41	45.1	103	60.9	53	43.8	171	58.6	94	44.3
E-7 to E-9	86	54.1	63	46.7	56	59.6	24	34.3	142	56.1	87	42.4
W-1 to W-4	34	39.5	38	48.7	--	--	--	--	34	39.5	38	48.7
O-1 to O-3	49	49.5	55	59.8	22	57.9	11	33.3	71	51.8	66	52.8
O-4 to O-6	99	41.4	103	45.4	33	52.4	25	46.3	132	43.7	128	45.6
Total	342	47.5	305	48.1	222	58.3	117	41.1	564	51.2	422	45.9
<u>Unemployed, looking for work</u>												
E-1 to E-3	5	35.7	1	9.1	8	47.1	1	14.3	13	41.9	2	11.1
E-4 to E-6	34	27.6	15	16.5	51	30.2	14	11.6	85	29.1	29	13.7
E-7 to E-9	50	31.4	10	7.4	21	22.3	6	8.6	71	28.1	16	7.8
W-1 to W-4	32	37.2	3	3.8	--	--	--	--	32	37.2	3	3.8
O-1 to O-3	14	14.1	1	1.1	7	18.4	3	9.1	21	15.3	4	3.2
O-4 to O-4	26	10.9	5	2.2	14	22.2	0	0.0	40	13.2	5	1.8
Total	161	22.4	35	5.5	101	26.5	24	8.4	262	23.8	59	6.4
<u>Employed full time (civilian)</u>												
E-1 to E-3	2	14.3	2	18.2	1	5.9	1	14.3	3	9.7	3	16.7
E-4 to E-6	8	6.5	17	18.7	5	3.0	37	30.6	13	4.5	54	25.5
E-7 to E-9	13	8.2	38	28.1	8	8.5	32	45.7	21	8.3	70	34.1
W-1 to W-4	10	11.6	26	33.3	--	--	--	--	10	11.6	26	33.3
O-1 to O-3	17	17.2	23	25.0	3	7.9	12	36.4	20	14.6	35	28.0
O-4 to O-6	47	19.7	70	30.8	7	11.1	17	31.5	54	17.9	87	31.0
Total	97	13.5	176	27.8	24	6.3	99	34.7	121	11.0	275	29.9
<u>Employed P/T or intermittently (civilian)</u>												
E-1 to E-3	0	0.0	2	18.2	0	0.0	1	14.3	0	0.0	3	16.7
E-4 to E-6	7	5.7	13	14.3	10	5.9	17	14.0	17	5.8	30	14.2
E-7 to E-9	7	4.4	20	14.8	9	9.6	8	11.4	16	6.3	28	13.7
W-1 to W-4	10	11.6	10	12.8	--	--	--	--	10	11.6	10	12.8
O-1 to O-3	19	19.2	13	14.1	5	13.2	6	18.2	24	17.5	19	15.2
O-4 to O-6	65	27.2	49	21.6	8	12.7	11	20.4	73	24.2	60	21.4
Total	108	15.0	107	16.9	32	8.4	43	15.1	140	12.7	150	16.3
<u>In the military</u>												
E-1 to E-3	1	7.1	1	9.1	0	0.0	0	0.0	1	3.2	1	5.6
E-4 to E-6	6	4.9	5	5.5	0	0.0	0	0.0	6	2.1	5	2.4
E-7 to E-9	3	1.9	4	3.0	0	0.0	0	0.0	3	1.2	4	2.0
W-1 to W-4	0	0.0	1	1.3	--	--	--	--	0	0.0	1	1.3
O-1 to O-3	0	0.0	0	0.0	1	2.6	1	3.0	1	0.7	1	0.8
O-4 to O-6	2	0.8	0	0.0	1	1.6	1	1.9	3	1.0	1	0.4
Total	12	1.7	11	1.7	2	0.5	2	0.7	14	1.3	13	1.4

**Table K-6**  
**Median Family Income by pay Grade Group (Q147)**

Pay Grade Group	Army		Air Force		Total	
	n	\$	n	\$	n	\$
E-1 to E-3	14	1025	17	1250	31	1200
E-4 to E-6	124	1500	164	1525	288	1505
E-7 to E-9	153	1901	91	2100	244	1998
W-1 to W-4	81	2001	--	--	81	2001
O-1 to O-3	97	2496	35	2397	132	2470
O-4 to O-6	225	3402	57	3532	282	3497

Table K-7 shows the percentage of spouses who were reported to have no income, as well as the median income by pay grade group of those spouses with income during the previous month.

**Table K-7**  
**Median Spouse Income by Pay Grade Group (Q148)**

Pay Grade Group	Army		Air Force		Total	
	n	%	n	%	n	%
<b><u>No Income</u></b>						
E-1 to E-3	9	64.3	14	93.3	23	79.3
E-4 to E-6	90	81.1	134	87.6	224	84.8
E-7 to E-9	113	80.1	71	82.6	184	81.1
W-1 to W-4	60	75.0	--	--	60	75.0
O-1 to O-3	58	63.0	26	76.5	84	66.7
O-4 to O-6	115	52.5	43	75.4	158	57.2
Total	445	69.9	288	83.5	733	73.1
<b><u>With Income</u></b>						
	n	\$	n	\$	n	\$
E-1 to E-3	5	1000	1	740	6	795
E-4 to E-6	21	750	19	498	40	550
E-7 to E-9	28	800	15	550	43	702
W-1 to W-4	20	595	--	--	20	595
O-1 to O-3	34	600	8	475	42	598
O-4 to O-6	104	698	14	970	118	702
Total	212	698	57	629	269	657



Greater percentages of spouses were without income in the Air Force sample than in the Army sample. Overall, spouses of O-4 to O-6 respondents showed a lower percentage without income (57%) than all other pay grade groups (67 to 85%).

### Special Groups

Several groups were identified in advance as having potentially different experiences with regard to housing and therefore possibly having attitudes, opinions, and problems different from their opposites (e.g., accompanied versus unaccompanied) or from the rest of the sample. Table K-8 presents the number and percentage in these special groups within each Service. Comparisons will be made between some of these groups (those groups large enough to be of interest and on which to perform statistical tests) in the section on special group. The percentages in Table K-8 are based on the accompanied sample only for the first five groups, and on the total sample for the sixth group.

Table K-8  
Special Groups

Special Group	Army		Air Force		Total	
	n	%	n	%	n	%
Accompanied female service members	12	1.6	1	0.3	13	1.1
Accompanied single parents	2	0.3	4	1.0	6	0.6
Service members with local national spouses	355	48.1	283	72.2	638	56.5
Service members with nonsponsored dependents	170	23.1	139	35.5	309	27.4
Respondents preferring to leave the service (excluding those with 20 years or more service)	13	1.7	7	1.7	20	1.7
Unaccompanied service members	898	54.8	325	45.0	1223	51.8

### Service History

This section presents data on time spent on prior foreign tours, at the present duty station, and remaining in the present tour.

#### Prior Foreign Experience (Q17)

Large majorities of each accompanied sample had experience in foreign locations prior to their present assignment (91.5% of the Army and 85.6% of the Air Force). Almost three-fourths of the accompanied Army service members (73.5) and about 63 percent of the Air Force had 2 or more years of foreign experience. Among the unaccompanied, a lower percentage (78 to 79%) had prior foreign experience, and a somewhat lower percentage had 2 years or more of experience (53 to 63%).

### Time Spent/Remaining in the Current Tour (Q18-Q19)

A majority of the accompanied in both service samples had been at their present installation for more than 1 year (59.6% Army, 66% Air Force). Approximately 12 percent of the Army sample and 2 percent of the Air Force had been at their present duty station for 6 months or less. Among the unaccompanied, almost all (96% Army, 91% Air Force) had been there for 1 year or less. Unaccompanied tours are generally for 1 year.

The majority of the accompanied Army sample had more than 6 months remaining in their present tour (61.5%). Among the Air Force accompanied, about 50 percent had less than and 50 percent had more than 6 months left in the current tour. For the unaccompanied, 56 percent of the Army sample and 88.5 percent of the Air Force sample had 6 months or less remaining in their tours.

These data imply that most of the accompanied respondents had knowledge of living in foreign countries, were "well established" in their living situations, and many could look forward to continuing to live in their current environment for 1 year or more.

### Military Career Intentions

Table K-9 presents data on the respondents' military career intentions.

Over 70 percent of the accompanied service members intended to make the Service a 20-year career, with the large majority of these individuals saying definitely yes. An additional 17.6 to 20.4 percent have already served 20 years or more. Less than 3 percent said they would probably or definitely not remain in the military for at least 20 years. The respondents were a highly career motivated group.

Slightly higher percentages of those unaccompanied on the tour did not plan to make the military a career or were uncertain about their career plans. In the Air Force, although almost the same percentage of accompanied and unaccompanied planned to make the military a career, the unaccompanied were somewhat less definite.

The E-1 to E-6 groups in the Army were more likely to express uncertainty about their career than the other pay grades. In both Services, the E-7 to E-9 and O-4 to O-6 groups were more likely to have already been in the service for 20 years than the others. The very low rates of negative intentions and uncertainty may not be the same in the population of service members in Korea as in the respondent sample due to the low return rates and very small numbers of E-1 to E-3. In addition, it is possible that service members who returned the questionnaire may in general be more highly career motivated than those who did not return the questionnaire. Unfortunately, no evidence can be obtained from this study to test the hypothesis.

Pay grade differences in career intentions among the unaccompanied were similar to those for the accompanied group. Approximately 40 percent of the E-1 to E-3 group expressed uncertainty about remaining in the military. They also expressed the highest percent negative (23.4% Army, 10.6% Air Force). Close to 70 percent of the E-4 to E-6 group in the Army and 81 to 100 percent of the others (except the E-1 to E-3s) in both Services either intended to remain 20 years or have already served 20 years or more.

Table K-9

## Career Intentions (Q20)

Career Intentions	Army			Air Force			Total	
	Accomp. n	%	Unaccomp. n	Accomp. n	%	Unaccomp. n	n	%
Definitely do not intend to remain 20 years	11	1.5	22	8	2.0	2	43	1.8
Probably do not intend to remain 20 years	6	0.8	28	2	0.5	10	46	2.0
Uncertain	45	6.1	83	21	5.3	30	179	7.6
Probably will remain at least 20 years	140	19.0	170	81	20.4	90	481	20.4
Definitely will remain at least 20 years	404	54.8	472	204	51.4	137	1217	51.6
Already have served 20 years or more	131	17.9	122	81	20.4	56	390	16.6
Total	737	100.1	897	397	100.0	325	2356	100.0

### Preferences After Completion of the Current Tour

Table K-10 presents the preferences of the respondents for their next assignment after completion of their current tour.

Preferences were generally similar in the two Services. Significantly higher percentages of unaccompanied than accompanied people wanted to return to CONUS. This was particularly true of the Army respondents. A slightly higher percentage of Air Force than Army personnel wanted to stay in Korea.

Pay grade showed a small relationship to preference in the Army sample. The E-4 to E-6 and W-1 to W-4 groups were more likely to want to extend or do another full tour than commissioned officers, who in turn were more likely to wish to return to CONUS. Commissioned officers were slightly less likely than other pay grade groups to say they wished to leave the Service, although the percentages were low for all pay grade groups. In the Air Force sample, the E-4 to E-9 groups were also more likely to wish to stay in Korea than were the officers.

## **PERMANENT HOUSING**

The next seven sections deal only with accompanied service members. The analyses of the unaccompanied respondents, is presented with special groups (p. 418).

This section presents basic data concerning service members' housing as well as their housing preferences.

### Time in Permanent Housing

A vast majority of respondents in each Service were living in permanent housing at the time of the survey (94.4 to 96.2% in each service). Table K-11 shows the length of time in permanent housing. Most of both samples had lived in their residence for 1 year or less, while a small percentage had been living in theirs for more than 2 years.

### Housing Type and Preference

Housing type refers to the ownership of the service member's residence (U.S. government-owned/managed, U.S. government-leased, economy, or other types of housing). Government-owned housing is usually on the installation, government-leased housing generally foreign built and located in the economy, along with the housing owned by local nationals and rented to Americans. Other housing may refer to other ownership arrangements.

Table K-12 shows the distribution of current and preferred housing types by Service and pay grade group. In the Army sample, the most frequent categories currently occupied were government-leased and economy and other housing (38% in each), while one-fourth lived in government-owned housing. In the Air Force sample, the majority (55%) lived in economy and other housing, about 20 percent in government-leased housing, and a small percentage (11.5%) in government-owned housing.

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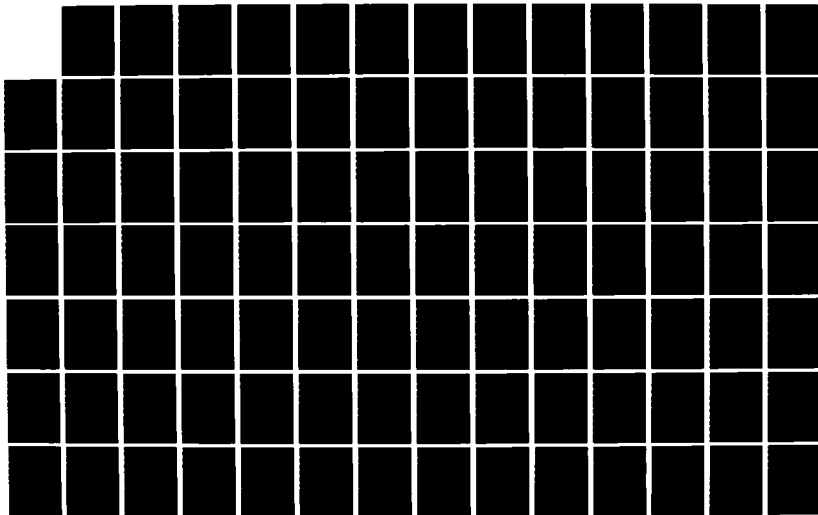
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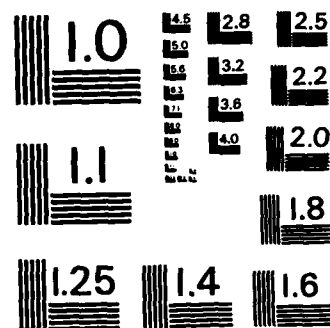
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Table K-10

## Preferences After Completion of the Current Tour (Q21)

Preference	Army			Air Force			Total	
	Accom. n	%	Unaccom. n	Accom. n	%	Unaccom. n	n	%
Another full tour in present country	103	14.1	33	53	13.4	21	210	8.9
Extend (for less than full tour) in current location	53	7.2	15	20	5.1	8	96	4.1
Another full tour in a different country	61	8.3	59	55	13.9	38	213	9.1
Return to CONUS	435	59.4	739	238	60.1	232	1644	70.0
Leave the Service	38	5.2	39	13	3.3	19	109	4.6
Unsure/no preference	42	5.8	13	17	4.2	6	78	3.3
Totals	732	100.0	898	396	100.0	324	2350	100.0

Table K-11

## Length of Time in Permanent Housing (Q48)

Time in Permanent Housing	Army		Air Force		Total	
	n	%	n	%	n	%
1 to 6 months	158	22.0	57	14.9	215	19.5
7 to 12 months	245	34.2	150	39.3	395	35.9
13 to 24 months	232	32.4	131	34.3	363	33.0
25 months or longer	82	11.4	44	11.5	126	11.5
Total	717	100.0	382	100.0	1099	99.9



Table K-12

Current and Preferred Housing Type by Service and Pay Grade Group (Q44-Q45)

Service/Pay Grade Group	n	Responses (%)					
		Government-owned		Government-leased		Economy/Other	
		Current	Preferred	Current	Preferred	Current	Preferred
<u>Army</u>							
E-1 to E-3	15	0.0	40.0	6.7	26.7	93.3	33.3
E-4 to E-6	117	9.3	50.4	16.9	16.2	73.8	33.4
E-7 to E-9	157	16.5	58.6	37.3	12.7	46.2	28.7
W-1 to W-4	86	7.0	79.1	52.3	10.5	40.7	10.4
O-1 to O-3	98	10.2	77.6	51.0	12.2	37.8	10.2
O-4 to O-6	243	51.9	93.8	39.5	3.3	8.6	2.9
Total	716	24.9	73.9	37.9	10.1	37.2	16.0
<u>Air Force</u>							
E-1 to E-3	16	6.3	50.0	0.0	6.3	93.7	43.7
E-4 to E-6	161	1.2	46.0	6.1	10.6	92.7	43.3
E-7 to E-9	100	12.0	53.0	24.0	6.0	64.0	41.0
O-1 to O-3	39	12.8	56.4	48.7	20.5	38.5	23.1
O-4 to O-6	65	36.9	80.0	38.5	7.7	24.6	12.3
Total	381	11.5	54.9	20.4	9.7	68.1	35.4

Type of current housing differed by pay grade group. In the Army, a large majority of the lower pay grade enlisted personnel (E-1 to E-6) lived in economy and other housing. The proportions were considerably greater than in the other pay grade groups, especially the senior officers, very few of whom lived in economy housing. Slightly over 50 percent of the warrant officers and junior officers lived in government-leased housing, while the majority of the senior officers lived in government-owned housing. The majority of all pay grade groups, except the senior officers, lived off the installation (i.e., in government-leased or economy and other housing).

Almost all in the lower pay grade enlisted groups (E-1 to E-6) and the majority of the E-7 to E-9 group in the Air Force sample lived in economy and other housing. Among the junior officers, few lived in government-owned housing, with the highest number living in government-leased housing. Among the Air Force senior officers, about equal percentages lived in government-owned and government-leased housing. A majority in all pay grade groups lived in some type of housing located off the installation.

In the Army sample, a large majority of the officers preferred to live in government-owned housing. A lesser majority of the E-7 to E-9 and E-4 to E-6 groups also preferred to live in government-owned housing. In the Air Force sample, approximately half (46 to 56%) of all pay grade groups except the senior officers preferred government-owned housing. In the latter group, 80 percent preferred this housing. Just over 40 percent of each of the Air Force enlisted groups preferred to live in economy and other housing. In the Army, between 29 and 33 percent of each of the enlisted groups preferred such housing. A low percentage of officers in each Service preferred economy and other housing.

Comparing the current and preferred columns, it can be seen that there were many more Service members in each Service and pay grade group who preferred to live in government-owned housing than actually did live in this type. The disparity was greatest among the E-1 to E-6s in each Service. More people lived in government-leased housing than preferred that type, more so in the Army than the Air Force sample. Also, more service members in both Services lived in economy housing than preferred to live there.

#### Housing Styles (Q44, Q46)

Table K-13 shows the distribution of housing styles by pay grade group and Service for the accompanied respondents. Unaccompanied service members, many of whom lived in barracks or dorms will be discussed with special groups (p. 418).

Approximately 50 percent in each Service lived in apartments, the great majority of which were walk-ups. The second most common housing style was the duplex (36% Army, 27% Air Force). Small percentages in each Service lived in single family or town-houses/rowhouses. Patterns of housing styles by pay grade were somewhat different in each Service. In the Army, the most common among all pay grades except the senior officers was apartments. The O-4 to O-6 group lived in duplexes for the most part (75%). In the Air Force sample, the most common housing style was also the apartment, except for the E-4 to E-6 group where apartments and duplexes showed similar percentages. The lower enlisted grades, E-1 to E-6, were somewhat more likely to live in single family housing than the other pay grades.

Table K-13

## Housing Styles by Service and Pay Grade Group (Q46)

Housing Style	Responses (%)						Total
	E-1 to E-3	E-4 to E-6	E-7 to E-9	W-1 to W-4	O-1 to O-3	O-4 to O-6	
<u>Army</u>	(n = 15)	(n = 113)	(n = 156)	(n = 85)	(n = 96)	(n = 243)	(n = 708)
Single family	13.3	12.4	9.6	3.5	7.3	2.9	6.8
Duplex	6.7	26.5	10.3	15.3	13.5	74.5	35.9
Town/rowhouse	26.7	11.5	6.4	8.2	8.3	0.4	6.1
Apartment (walk-up)	40.0	40.7	41.7	69.4	67.7	21.0	41.2
Apartment (elevator)	13.3	8.8	32.1	3.5	3.1	1.2	10.0
<u>Air Force</u>	(n = 15)	(n = 160)	(n = 98)	--	(n = 39)	(n = 65)	(n = 377)
Single family	26.7	20.0	9.2	--	2.6	1.5	12.5
Duplex	6.7	36.3	25.5	--	12.8	21.5	27.3
Town/rowhouse	13.3	10.0	11.2	--	7.7	13.8	10.9
Apartment (walk-up)	53.3	31.9	50.0	--	74.4	61.5	46.9
Apartment (elevator)	0.0	1.9	4.1	--	2.6	1.5	2.4

In the Army, the vast majority of government-owned housing was duplex-style (80%), while government-leased housing consisted largely of apartments (73.4%) and 23 percent duplexes. The style of economy housing varied, with the largest percentage (55.5%) apartments and between 10 and 20 percent single family and duplexes. Almost 90 percent of the Army residences were duplexes and apartments. Among the apartments, the vast majority were walk-ups.

In the Air Force sample, government-owned housing was largely apartments (40%) and duplexes (35%), with approximately 21 percent townhouses or rowhouses. Over 90 percent of the government-owned housing was apartment-style. Economy housing was almost equally duplexes (33%) and apartments (38%). Between 11 and 18 percent lived in townhouses or rowhouses and single family homes. The largest percent of residences were apartments (49%) followed by duplexes (27%). A relatively small percentage of respondents lived in townhouses/rowhouses or single family dwellings.

#### Commuting Distances to Installation (Q52)/Community Types (Q54)

The very large majority (approximately 86%) of respondents in each Service lived 2 to 5 miles from their duty station. Less than 10 percent lived 10 or more miles from the installation. The majority (61% in the Army and 65% in the Air Force) said their commute time was 15 minutes or less from their residences to their installations. Approximately 13 percent (Army) and 15 percent (Air Force) reported commuting times of more than 25 minutes. The average time reported was 17 minutes for the Army sample and 15 minutes for the Air Force sample. In the Air Force sample, greater percentage of the officers than of the enlisted personnel had very short commuting times (10 minutes or less), while a higher percentage of lower enlisted groups (especially the E-4 to E-6 group) reported longer commuting times. There were no statistically meaningful pay grade differences in the Army sample.

The question on community type asked about the mix of Americans and non-Americans in the community/neighborhood where the service member lived and was asked only of those living in economy or government-leased housing. In the Army sample, almost equal percentages lived in each of the three types: communities where most others were Americans, where there was an equal mix of Americans and local nationals, and where there were few or no other Americans. In the Air Force sample, a smaller percentage lived in communities where most were Americans (19%), compared to the other two community types with about equal percentages (39 and 43%). In general, almost all members of the lower enlisted groups (E-1 to E-6) lived in communities with either an equal mix of Americans and local nationals or where few or no other Americans lived. Very few lived in communities with mostly Americans. The senior officers predominantly lived in communities where there were mostly Americans. The other pay grade groups (E-7 to E-9, W-1 to W-4--Army, and O-1 to O-3) showed a more even distribution among the three community types.

#### Sharing Living Expenses (Q51)/Out-of-pocket Expenses for Housing (Q50)

Very few respondents in either Service (approximately 3.7% in each Service) reported sharing living expenses with persons other than their dependents.

The majority in both Services (56 and 60%) reported no out-of-pocket expenses for housing. Table K-14 shows the distribution of these responses by Service and pay grade group. The reader is cautioned that the percentages reporting monthly expenses in excess of \$600 probably represent respondent error in the use of the answer form.

Table K- 14

## Out-of-pocket Expenses for Housing Per Month (Q50)

Out-of-pocket Expenses	Responses (%)						Overall Total
	E-1 to E-3	E-4 to E-6	E-7 to E-9	W-1 to W-4	O-1 to O-3	O-4 to O-6	
<u>Army</u>							
None	37.5	43.5	54.8	58.0	59.4	75.5	60.4
\$10 - 50	12.5	4.8	3.6	0.0	3.0	1.2	2.7
60 - 100	12.5	16.9	9.0	12.5	7.9	2.4	8.5
110 - 150	0.0	3.2	6.6	1.1	3.0	1.2	3.0
160 - 200	6.3	6.5	4.8	6.8	5.0	1.6	4.3
210 - 250	6.3	6.5	1.8	3.4	5.0	0.8	3.0
260 - 300	6.3	0.0	2.4	1.1	1.0	0.4	1.1
310 - 400	0.0	2.4	1.2	2.3	2.0	0.8	1.5
410 - 600	6.3	0.8	2.4	2.3	2.0	0.8	1.6
610 - 1000	12.5	13.7	12.7	11.4	10.9	15.1	13.2
1010 - 1500	0.0	1.6	0.6	1.1	1.0	0.0	0.7
1500+	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<u>Air Force</u>							
None	52.9	39.7	61.4	--	65.0	87.7	56.2
\$10 - 50	11.8	14.9	7.9	--	2.5	0.0	9.3
60 - 100	11.8	16.1	8.9	--	10.5	0.0	10.8
110 - 150	0.0	6.9	4.0	--	2.5	0.0	4.3
160 - 200	0.0	2.3	5.0	--	5.0	0.0	2.8
210 - 250	5.9	2.3	4.0	--	0.0	0.0	2.3
260 - 300	5.9	1.1	1.0	--	0.0	1.5	1.3
310 - 400	5.9	2.3	0.0	--	2.5	0.0	1.5
410 - 600	0.0	0.6	1.0	--	0.0	1.5	0.8
610 - 1000	5.9	13.2	5.9	--	12.5	9.2	10.3
1010 - 1500	0.0	0.6	1.0	--	0.0	0.0	0.5
1500+	0.0	0.0	0.0	--	0.0	0.0	0.0

## Army

In the Army sample, where 62.8 percent of the respondents were living in government-owned or government-leased housing, 60.4 percent reported no out-of-pocket monthly expenses for housing. The percentages reporting this increased as pay grade increased. Overall, nearly one-quarter (24.1%) reported having expenses up to \$400 per month.

## Air Force

In the Air Force sample, less than one-third (31.9%) were living in government-owned or government-leased housing. However, 56.2 percent reported they had no out-of-pocket monthly expenses. Approximately one-third (32.3%) reported they had expenses up to \$400 per month.

# PROCESS OF OBTAINING HOUSING

## Introduction

Most service members live in temporary housing when they first report to their foreign duty station, prior to moving into permanent housing. The following section presents data concerning objective and subjective aspects of the temporary lodging experience.

The questions were directed only to those who had lived in (or currently lived in) temporary lodgings at their present duty station. In addition, some of the questions were not relevant to certain groups who had experience in temporary lodgings (e.g., costs and temporary living allowance for those in government facilities, play space for children among those without children). Therefore, nonresponse was high on all questions concerning temporary housing as a result of lack of experience at the present installation or inapplicability of selected items to certain groups (37.5 to 70% in the Army sample and 58 to over 80% in the Air Force). Although the numbers are much smaller than in other analyses, we believe data on temporary lodging based on the limited number of service members with relevant experience are useful nonetheless.

## Temporary Housing (Q43)

Very few of the respondents (3.8% of the Army sample and 5.6% of the Air Force) were living in temporary lodgings at the time of the survey.

## Time Unaccompanied Before Arrival of Dependents

Table K-15 shows the percentage of service members by the amount of time they reported spending unaccompanied before the arrival of their dependents.

A majority in both Services arrived at their foreign location along with their dependents, spending no time unaccompanied. More individuals in the Army than in the Air Force had to wait for their dependents.

In the Army sample, more of the 0-1 to 0-3 group had to wait for dependents than did those in other pay grade groups. There were no differences in the Air Force sample.

Table K-15

## Time Unaccompanied Before Arrival of Dependents (Q104)

Weeks Unaccompanied	Army		Air Force		Total	
	n	%	n	%	n	%
None	278	58.6	124	72.9	402	62.4
1 to 4 weeks	37	7.8	12	7.1	49	7.6
5 to 8 weeks	55	11.6	14	8.2	69	10.7
9 to 12 weeks	42	8.9	6	3.5	48	7.4
13 weeks or longer	62	13.1	14	8.4	76	11.8
Total	474	100.0	170	100.1	644	99.9

Actual and Preferred Types of Temporary Lodgings

Table K-16 shows the percentages of respondents by the type of temporary lodgings they occupied when they arrived at their present duty station (government-owned, government-leased, economy), along with the percentages by preferred type of temporary accommodations. The disparity columns refer to the differences between the percent who occupied that type of lodging and the percent who preferred to occupy that type. A negative disparity indicates a shortage of a particular housing type because it means that more individuals preferred than occupied that type.

Approximately 40 percent of the Army sample occupied economy and about 40 percent occupied government-owned temporary lodgings, with the remaining 20 percent in government-leased quarters. In the Air Force, a majority (53.6%) occupied economy temporary lodgings when they first arrived at their duty station. Approximately one-third occupied government-owned quarters and 11.9 percent, government-leased quarters. Preference for government-owned housing was high in both Services and across pay grade groups (75.8% Army and 73.2% Air Force), with 12.5 and 14.3 percent preferring government-leased and economy housing. Disparities show higher percentages preferred government-owned quarters than actually lived there and higher percentages lived in economy lodgings than preferred to be there. These disparities are consistent across pay grades.

Days in Temporary Lodgings (Q107)/Time Drawing TLA Q108)

Among those who reported time spent in temporary lodgings, almost all (81% of the Army and 96% of the Air Force) spent 60 days or less. About 61 percent in the Army and 84 percent in the Air Force spent 30 days or less. Pay grade group was not related to time spent in temporary lodgings.

Number of days drawing TLA generally paralleled the number of days in temporary lodgings. Over 90 percent in both Services received TLA for 60 days or less with the large majority receiving it for 30 days or less.

Table K-16  
Type of Temporary Lodgings Occupied and Preferred (Q105-Q106)

Service/Pay Grade Group	Responses (%)							
	Government-owned		Government-leased		Occupied		Economy Preferred	
	Occupied	Disparity	Preferred	Disparity	Occupied	Disparity	Preferred	Disparity
<u>Army</u> <sup>a</sup>	(n = 178)		(n = 353)		(n = 94)		(n = 58)	
E-4 to E-6	34.5	26.6	61.1	5.9	14.5	5.9	20.4	5.9
E-7 to E-9	28.6	41.8	70.4	-2.0	17.3	-2.0	15.3	-2.0
W-1 to W-4	38.8	39.2	78.0	-9.6	20.4	-9.6	10.0	-9.6
O-1 to O-3	43.3	38.8	82.1	-15.0	25.4	-15.0	10.4	-15.0
Total <sup>b</sup>	38.2	37.6	75.8	-7.8	20.2	-7.8	12.4	-7.8
<u>Air Force</u> <sup>a,c</sup>	(n = 58)		(n = 123)		(n = 20)		(n = 21)	
E-4 to E-6	28.4	35.8	64.2	14.9	3.0	14.9	17.9	14.9
E-7 to E-9	23.9	50.0	73.9	-10.8	21.7	-10.8	10.9	-10.8
O-4 to O-6	47.5	30.0	77.5	-5.0	15.0	-5.0	10.0	-5.0
Total <sup>b</sup>	34.5	38.7	73.2	0.6	11.9	0.6	12.5	0.6

<sup>a</sup>The E-1 to E-3 group was too small to present meaningful data.

<sup>b</sup>The number of respondents from the pay grade groups not shown are included in the total.

<sup>c</sup>The O-1 to O-3 group was too small to present meaningful data.



## Opinions about Temporary Lodgings

### Satisfaction with Aspects of Temporary Lodgings

Respondents were asked to express their satisfaction level with various aspects of the last temporary residence during their current tour, as well as their satisfaction with overall adequacy and comfort. In the Army, the last temporary residence was government-owned for 40 percent and economy lodgings for 42 percent, with the rest in government-leased. In the Air Force, a majority (58%) lived in economy lodgings, with 30 percent in government-owned and the others in government-leased quarters.

Features Most Often Reported as not Available. Certain features associated with typical housing were reported as not available in temporary lodgings. The percentages who reported these features as unavailable are shown in Table K-17 by Service and type of housing.

Nonavailability of kitchen, eating, and cooking facilities, laundry facilities, and play space for children was higher in the Air Force than in the Army sample. Nonavailability was only slightly higher in economy lodgings than in government-owned and government-leased housing in the Army sample. However, in the Air Force sample, service members in both government-leased and economy housing reported nonavailability more frequently than those in government-owned temporary quarters for all three items. Table K-17 shows a relative high degree of lack of characteristics usually considered important for family living. These percentages are based on small numbers in the Air Force sample, especially for those living in government-owned or government-leased temporary quarters.

Satisfaction Levels. Table K-18 shows the percentages satisfied and dissatisfied with 10 aspects of the last temporary residence, as well as with the overall comfort and adequacy of that residence. The very and somewhat satisfied responses were combined, as were the very and somewhat dissatisfied responses. Omitted from the table for the purpose of simplification are the neither dissatisfied nor satisfied and the not available responses. Air Force percentages are based on very small numbers, especially for government-owned and government-leased housing.

Size of the temporary quarters showed the highest level of dissatisfaction in both Services and across all housing types. Overall satisfaction with temporary lodging showed approximately equal percentages of satisfied and dissatisfied service members in government-owned housing (Army and Air Force) and government-leased housing (Army). Residents in economy temporary lodgings in both Services were much more dissatisfied than those in government-leased housing in the Air Force. Between 56 and 58.5 percent expressed dissatisfaction with the adequacy and comfort of their economy lodgings (and government-leased lodgings in the Air Force sample).

Among residents of government-owned lodgings, dissatisfaction was also relatively high (44 to 45%). In addition to size of quarters, laundry facilities and play space for children were rated as unsatisfactory by 40 percent or more respondents across all housing types in the Army sample.

Table K-17

Features Most Often Reported as Not Available (Q114-Q115, Q117)

Feature	Responses (%)					
	Army			Air Force		
	Government		Economy	Government		Economy
	Owned	Leased		Owned	Leased	
Q114: Kitchen, eating, cooking facilities	23.6	27.0	31.0	38.1	48.6	51.4
Q115: Laundry facilities	26.1	25.8	35.1	28.6	47.2	52.2
Q117: Play space for children	23.3	25.5	31.7	29.4	51.6	64.6

Table K-27

Overall Satisfaction with the Residence by Housing Type (Q88-Q89)

Service/ Housing Type	n	Service Member (%)		n	Spouse (%)	
		Dissatisfied	Neutral		Dissatisfied	Satisfied
<u>Army</u>						
Government-owned	174	15.5	10.3	174	19.5	67.2
Government-leased	269	40.1	13.4	268	48.1	41.1
Economy/other	259	48.7	17.0	259	50.9	34.0
<u>Air Force</u>						
Government-owned	44	27.2	9.1	43	30.2	48.8
Government-leased	77	48.1	20.8	77	52.0	28.6
Economy/other	258	50.4	15.5	253	46.7	33.2

Table K-26

Overall Satisfaction with the Residence by Pay Grade Group (Q88-Q89)

Service/Pay Grade Group	Service Member (%)			Spouse (%)				
	n	Dissatisfied	Neutral	Satisfied	n	Dissatisfied	Neutral	Satisfied
<b>Army</b>								
E-1 to E-3	15	46.7	20.0	33.4	15	60.0	6.7	33.4
E-4 to E-6	113	38.0	17.7	44.2	112	39.0	19.5	41.5
E-7 to E-9	155	39.4	11.0	49.7	155	40.6	9.7	49.7
W-1 to W-4	83	45.8	12.0	42.2	83	50.6	9.6	39.8
O-1 to O-3	97	50.0	15.5	34.0	98	55.1	16.3	28.6
O-4 to O-6	242	26.5	14.0	59.5	240	35.0	12.1	52.9
Total	705	27.2	14.0	48.8	705	42.0	12.9	45.0
<b>Air Force</b>								
E-1 to E-3	16	56.3	12.5	31.3	16	50.0	12.5	37.5
E-4 to E-6	161	42.2	21.1	36.7	161	37.9	25.5	36.7
E-7 to E-9	99	49.5	10.1	40.4	96	50.0	14.6	35.4
O-1 to O-3	39	41.1	17.9	41.0	38	39.5	21.1	39.5
O-4 to O-6	65	58.5	10.8	30.8	63	63.5	15.9	20.6
Total	380	47.4	15.8	36.8	374	46.0	20.1	34.0

Table K-25

## Satisfaction with Overall Comfort and Adequacy of the Residence (Q88-Q89)

Respondents	n	Responses (%)		
		Dissatisfied	Neutral	Satisfied
<u>Army</u>				
Service member	705	37.2	14.0	48.8
Spouse	704	42.0	12.9	45.0
<u>Air Force</u>				
Service member	380	47.4	15.8	36.8
Spouse	374	46.0	20.1	34.0

Overall Satisfaction by Pay Grade Group, Housing Type, and Household Composition.  
Table K-26 presents overall satisfaction for service members and spouses by pay grade group.

In the Army sample, there was an overall statistically significant difference among the pay grades, with the strongest difference between the junior and senior officers. The 0-4 to 0-6 group was higher on average satisfaction than the 0-1 to 0-3 group. The 0-4 to 0-6 group showed the highest satisfaction among all Army pay grade groups. Within the pay grade groups, the E-7 to E-9 group was more satisfied than dissatisfied, while the 0-1 to 0-3 group was more dissatisfied than satisfied.

In the Air Force sample there was no overall statistical difference among the service members by pay grade group. The small samples in some of the groups mitigated against the average differences (which also are reflected in the percentages) with the senior officers showing the largest difference in percentages satisfied and dissatisfied. Among senior officers, the pattern is reversed from that in the Army, with a much higher percentage dissatisfied than satisfied with the overall comfort and adequacy of their residences.

Another factor that was hypothesized to affect overall satisfaction was the type of housing, especially whether one lived in government-owned housing or in government-leased, economy, or other housing (usually located in the economy). The analysis categorized type of housing as government-owned, government-leased and economy/other. Table K-27 shows the relationship between type of housing and overall satisfaction.

In both Services, service member and spouse satisfaction was much higher for those living in government-owned housing. In both Services, a majority of the service members in government-owned housing (74% in the Army and 64% in the Air Force) reported satisfaction with the overall adequacy and comfort of their residences. (Satisfaction rates for service members in government-leased and economy/other housing ranged from 46.4 to 31.2% in each service.) For service members in economy housing, a higher percentage reported dissatisfaction than satisfaction in both Services (34 to 49% in the Army and 34 to 50% in the Air Force). Residents of government-leased housing were similar to those in economy housing in their ratings of overall satisfaction. A slightly higher percentage of Army service members were satisfied than dissatisfied (46 to 40%).

Table K-24

## Satisfaction with Waiting Time and Assignment and Referral Services (Q40-Q42)

Item	n	Responses (%)		
		Dissatisfied	Neutral	Satisfied
<u>Army</u>				
Q40: Length of wait for government housing	545	56.1	6.6	37.3
Q41: Referral services of the housing office	381	61.2	14.4	24.4
Q42: Assignment services of the housing office	503	53.3	13.5	33.2
<u>Air Force</u>				
Q40: Length of wait for government housing	170	42.3	7.6	50.0
Q41: Referral services of the housing office	136	64.7	18.4	16.9
Q42: Assignment services of the housing office	171	55.0	15.2	29.8

**SATISFACTION WITH PERMANENT HOUSING, FACILITIES, AND SERVICES**Satisfaction Levels

In order to measure satisfaction, 33 questions were asked about various characteristics of the individuals' present permanent residence, as well as about several services and facilities (e.g., for children, transportation). Included were two questions on overall satisfaction with adequacy and comfort of the residence, one for the service member and the other for the spouse. This section presents descriptive data on satisfaction, as well as characteristics of the individual, housing, and experiences that are related to satisfaction.

Overall Satisfaction

Table K-25 shows overall satisfaction by Service for the service member and spouse. (It is assumed that the service member answered for the spouse on the second item.) The two dissatisfied and the two satisfied categories were combined.

In the Army sample, a higher percentage reported satisfaction than dissatisfaction with the overall comfort and adequacy of the residence. The difference was greater for the service member than for the spouse. In the Air Force sample, a higher percentage reported dissatisfaction than satisfaction for both themselves and their spouses. The percentage of service members who were neutral about their residence (neither dissatisfied nor satisfied) was very similar for service members in both Services. The differences in average satisfaction ratings between the two Services represent a statistically reliable difference for both service members and their spouses. Satisfaction was significantly higher in the Army sample.

Table K-23

## Satisfaction with Aspects of Economy Housing Listings (Q29-Q33)

Listing Aspect	n	Responses (%)		
		Dissatisfied	Neutral	Satisfied
<u>Army</u>				
Q29: Number of listings	156	62.9	17.3	19.9
Q30: Up-to-date information on listings	153	54.2	18.3	27.4
Q31: Size of housing units	182	59.4	13.2	27.4
Q32: Rental costs	185	69.7	11.9	18.3
Q33: Commuting distances from rentals to installations	189	23.8	17.5	58.8
<u>Air Force</u>				
Q29: Number of listings	145	69.0	22.8	8.3
Q30: Up-to-date information on listings	138	65.2	23.2	11.6
Q31: Size of housing units	186	67.2	19.4	13.4
Q32: Rental costs	182	56.0	19.2	24.7
Q33: Commuting distances from rentals to installations	194	28.9	22.2	49.0

Respondents in both Services were, in the majority, dissatisfied with four of the five aspects of housing office listings of economy housing. They were more satisfied than dissatisfied only with the distance of the rental listings to their installation. With the exception of distance to the installation, less than 30 percent in each Service were satisfied with any aspect of economy listings. The dissatisfaction may be, in part, a function of the lack of availability (number) of economy rentals, which in turn may affect the other aspects since choices may be limited.

The relationships between satisfaction with economy listings and pay grade group were small and not consistent among the various aspects measured.

Satisfaction with Waiting Time for Government Housing and Assignment and Referral Services of the Housing Office

Table K-24 shows the responses to questions about satisfaction with waiting time for government housing and assignment and referral services of the housing office. Table K-24 includes data from all who responded to these questions, regardless of their current type of housing (i.e., government-owned, government-leased, or economy). Again, the two satisfied and the two dissatisfied categories were combined.

A majority of the respondents in the Army sample were dissatisfied with all three aspects. In the Air Force sample, a majority were dissatisfied with the assignment and referral services. A slightly higher percentage were satisfied with the wait for government housing than were dissatisfied (50 to 42%). There was a slightly higher level of dissatisfaction in both Services (especially in the Air Force) with referral services than with assignment services.

In the Army sample, satisfaction levels with waiting time and assignment and referral services were not strongly related to pay grade group. In the Air Force, the E-4 to E-6 group were more dissatisfied with the wait for government housing and with assignment services than the other pay grades were.

Table K-22  
Housing Office Helpfulness (Q34-Q39)

Housing Office Service	n	Responses (%)			
		Not Provided	Did Not Use	Not Helpful	Helpful
<u>Army</u>					
Q34: Orientation to the local housing market	251	43.8	23.5	11.2	21.5
Q35: Transportation to inspect rentals	251	53.4	20.7	5.2	20.7
Q36: Language interpretation dealing with landlords	247	42.5	30.0	9.3	18.2
Q37: Lease review and/or rental negotiation	248	39.1	25.4	10.5	25.0
Q38: Overall help finding economy housing	251	37.8	22.3	15.1	24.7
Q39: Help with utility companies	252	50.0	31.7	13.5	4.8
<u>Air Force</u>					
Q34: Orientation to the local housing market	249	44.2	32.9	12.4	10.4
Q35: Transportation to inspect rentals	249	60.2	24.5	8.8	6.4
Q36: Language interpretation dealing with landlords	246	43.5	35.4	9.8	11.4
Q37: Lease review and/or rental negotiation	246	36.2	28.9	10.2	24.8
Q38: Overall help finding economy housing	249	41.8	32.9	16.9	8.4
Q39: Help with utility companies	249	42.2	27.7	15.3	14.8



Among those with sponsors, very similar percentages in both Services saw them as having negative and as having positive attitudes toward living conditions at their duty station. With regard to helpfulness of the sponsor in family adjustment, a large percentage in each Service reported that they had no sponsor, no help was needed, or the sponsor was unavailable (45.5% in the Army, 53.2% in the Air Force). Of those who rated their sponsors on helpfulness in adjusting to the new installation, the majority reported the sponsor was helpful.

In both Services, service members who saw their sponsor as having a positive attitude toward living conditions were less likely to say that experiences in temporary housing led to a less than satisfactory choice of permanent housing and to a worsened attitude toward living overseas than those who saw their sponsors as having negative attitudes. Also, those who perceived sponsors as helpful with family adjustment showed a lower percentage reporting negative effects of the temporary housing experience on both choice of a permanent residence and attitude toward living overseas than those with unhelpful sponsors. These results are suggestive, but for statistical and theoretical reasons should not be interpreted as cause and effect.

#### Housing Office Services/Satisfaction with Services and Helpfulness

Three sets of questionnaire item responses are reported in this section. The first two represent the opinions and experiences of those respondents living in economy housing only, since they deal with housing office services in obtaining economy housing. The third set includes all respondents.

##### Housing Office Helpfulness

Table K-22 shows the responses to six items dealing with helpfulness of the housing office in provision of services to personnel seeking economy housing.

Substantial percentages in both Services reported that the various listed services were not provided. In addition, between 20 and 35 percent of the respondents also reported not using the listed services. For the five specific services, as well as overall helpfulness, between 60 and 80 percent of the respondents did not use the service.

The questionnaire did not provide information on why individuals did not use the various services. Of the few who rated the helpfulness of the housing office, the Army sample rated the housing office as helpful on four of the five specific services and overall. Of those in the Air Force who rated the housing office, most of their item responses showed about equal percentages rating the office as helpful and not helpful.

In the Army sample, the senior officers were less likely to report the service as not provided and more likely to report nonuse of the service than the other pay grade groups for all items listed. This trend was also seen among the two officer groups in the Air Force sample. The E-1 to E-3 group in the Air Force also were less likely to report that the service was not provided and more likely to report nonuse; however, the sample of these individuals was very, very small.

##### Economy Housing Listings

Five items on the questionnaire asked the respondents to indicate their satisfaction with aspects of the economy rental listings provided by the housing office. Table K-23 shows the distribution of responses. Very satisfied and somewhat satisfied were combined as were the two dissatisfied categories.

Table K-21

## Reporting of Sponsor Attitude and Assistance (Q143-Q144)

Item	Army		Air Force		Total	
	Enlisted	Officer	Enlisted	Officer	Enlisted	Officer
Q143: Sponsor Attitude	(n = 177)	(n = 353)	(n = 188)	(n = 86)	(n = 365)	(n = 439)
Negative	39.0	41.1	41.0	27.9	40.0	38.5
Equally negative and positive	21.5	14.7	27.6	22.1	24.6	16.2
Positive	39.5	44.2	31.4	50.0	35.4	45.3
Q144: Sponsor Assistance	(n = 143)	(n = 379)	(n = 236)	(n = 99)	(n = 379)	(n = 478)
No help needed	19.6	10.3	40.2	14.1	32.4	11.1
Sponsor unavailable	11.2	10.3	15.2	6.1	13.7	9.4
Not helpful	13.3	19.5	15.2	13.1	14.5	18.2
Helpful	55.9	59.9	29.4	66.7	39.4	61.3

Table K-20

Effects of the Type of the Last Temporary Lodging Occupied (Q109-Q110)

Type of Temporary Housing	Army	Air Force
Percentage Reporting a Less than Satisfactory Choice of Permanent Housing		
Government-owned lodgings	20.8	27.7
Government-leased lodgings	23.8	23.8
Economy lodgings	29.7	43.0
Percentage Reporting a "Worsened" Attitude Toward Living Overseas		
Government-owned lodgings	24.5	19.1
Government-leased lodgings	15.7	33.3
Economy lodgings	26.0	21.1

Table K-19 (Continued)

Service/Pay Grade Group	Responses (%)			
	On the Respondent's Attitude (Q111)			
	<u>n</u>	<u>Worsened</u>	<u>No Effects</u>	<u>Improved</u>
<u>Army</u>				
E-1 to E-3	5	20.0	60.0	20.0
E-4 to E-6	51	29.4	60.8	9.8
E-7 to E-9	94	22.3	68.1	9.6
W-1 to W-4	47	25.5	66.0	8.5
O-1 to O-3	68	30.9	58.8	10.3
O-4 to O-6	193	19.7	74.6	5.7
Total	458	23.6	68.3	8.1
<u>Air Force</u>				
E-1 to E-3	1	0.0	100.0	0.0
E-4 to E-6	65	23.1	75.4	1.5
E-7 to E-9	45	8.9	86.7	4.4
O-1 to O-3	13	30.8	69.2	0.0
O-4 to O-6	39	33.3	61.5	5.1
Total	163	22.1	74.8	3.1
<u>Total</u>				
E-1 to E-3	6	16.7	66.7	16.7
E-4 to E-6	116	25.9	69.0	5.2
E-7 to E-9	139	18.0	74.1	7.9
W-1 to W-4	47	25.5	66.0	8.5
O-1 to O-3	81	30.9	60.5	8.6
O-4 to O-6	232	22.0	72.4	5.6
Total	621	23.2	70.0	6.8

Table K-19  
Effects of the Temporary Lodging Experience

Service/Pay Grade Group	Responses (%)			
	On Permanent Housing Choice (Q110)			
	<u>n</u>	<u>Less than Satisfactory</u>	<u>No Effect</u>	<u>Satisfactory Choice</u>
<u>Army</u>				
E-1 to E-3	5	20.0	60.0	20.0
E-4 to E-6	51	33.3	47.1	19.6
E-7 to E-9	94	31.9	42.6	25.5
W-1 to W-4	48	27.1	50.0	22.9
O-1 to O-3	67	28.4	56.7	14.9
O-4 to O-6	193	18.1	68.4	13.5
Total	458	25.1	57.0	17.9
<u>Air Force</u>				
E-1 to E-3	1	100.0	0.0	0.0
E-4 to E-6	64	48.4	37.5	14.1
E-7 to E-9	45	31.1	55.6	13.3
O-1 to O-3	12	25.0	50.0	25.0
O-4 to O-6	39	23.1	66.7	10.3
Total	161	36.0	50.3	13.7
<u>Total</u>				
E-1 to E-3	6	33.3	50.0	16.7
E-4 to E-6	115	41.7	41.7	16.5
E-7 to E-9	139	31.7	46.8	21.6
W-1 to W-4	48	27.1	50.0	22.9
O-1 to O-3	79	27.8	55.7	16.5
O-4 to O-6	232	19.0	68.1	12.9
Total	619	27.9	55.3	16.8

### Effects of the Temporary Lodging Experience

In order to assess the effects of experience in temporary lodgings, respondents were asked the effects of their experiences on their choice of permanent housing and attitude toward living in a foreign location. Table K-19 presents these data by pay grade group.

Table K-19 shows that individuals in both Services perceived more of an effect of experiences in temporary housing on choice of permanent housing than on attitudes toward living in a foreign location. The majority of both Services reported no effect on both items, although 43 percent (Army) to almost 50 percent (Air Force) reported an effect on choice of permanent housing. Among these service members, the majority perceived a negative effect on choice. Attitudes toward living overseas were not affected by the experience in temporary housing for between 68 and 75 percent of those responding. Of the 32 and 25 percent who reported an effect, the very large majority said the experience worsened their attitude.

Pay grade group did not relate statistically to perceived effect of the temporary housing experience in the Army sample. In the Air Force sample, the E-4 to E-6 group was more likely than were the other pay grade groups to report that the temporary housing experience led to a less than satisfactory choice of permanent housing.

Effect of the Type of Temporary Lodgings. Table K-20 illustrates the perceived negative effects of temporary lodging experiences as a function of the type of the last temporary lodging occupied.

The only difference worthy of note is the greater negative effect reported by those Air Force respondents living in economy temporary lodgings on the choice of a permanent residence. Because so few responded to the question, however, the difference is not statistically significant.

### Sponsor Program (Q143-Q144)

Respondents were asked two questions about their sponsors. One was on sponsor attitude toward living conditions at the foreign location; the second, on helpfulness of the sponsor with the respondent's family adjustment.

Some respondents reported not having sponsors, 28.9 percent in the Army sample and 14.8 percent in the Air Force sample. Not having a sponsor was related to pay grade in both Services with a higher percentage of enlisted than officer respondents reporting no sponsor. Differences were greater in the Army sample (there was a higher percentage without sponsors in the Army). The percentage without sponsors ranged from 61 percent of the E-4 to E-6 group to 4.9 percent of the O-4 to O-6 group in the Army. In the Air Force sample, 18.6 percent of the E4 to E6 group down to 2.5 percent of the O-1 to O-3 group reported having no sponsors. Less than 8 percent of the senior officers reported having no sponsors in each Service.

Table K-21 shows the distribution of responses by enlisted/officer for those respondents who had sponsors.

Grouping the Satisfaction Items. A statistical procedure designed to develop meaningful groupings of individual items (factor analysis) was applied to the 11 satisfaction items. Factor analysis provides information on the various dimensions (factors) that underlie a set of interrelated items. The results showed two factors in the Army sample and three factors in the Air Force sample that accounted for a large amount of the interrelationships among the 11 items, including overall satisfaction.

In the Army sample, the first factor (grouping of items) showed 8 of the 11 items highly related. This factor, which included overall satisfaction as a major component, can be interpreted as a general feeling of satisfaction/dissatisfaction that permeates responses to the eight individual items (security, privacy, kitchen, eating and cooking facilities, laundry facilities, cleanliness, play space for children, size of quarters and overall satisfaction). The second factor was comprised of the two convenience items (convenience of the residence to the installation and to government facilities). Satisfaction with cost was moderately related to both factors.

Three factors emerged from the analysis for the Air Force sample. The first factor dealt with satisfaction with security, privacy, cleanliness, overall comfort and adequacy of the temporary lodgings, and, to a lesser extent, satisfaction with size and costs. The second factor involved satisfaction with kitchen, eating and cooking facilities, laundry facilities, play space for children, size of quarters and, to a lesser extent, overall satisfaction and satisfaction with costs. The third factor was comprised of the two convenience items, and, to a much lesser extent, of satisfaction with size and costs. Satisfaction with size and costs and overall satisfaction were related to all three factors. The first factor in each of the services explains the largest amount of the interrelationships.

Predicting Overall Satisfaction. Another statistical procedure, multiple regression, was employed to determine what variables best predict overall satisfaction with the comfort and adequacy of one's temporary lodgings. In addition to the 10 individual satisfaction questions, other selected variables (children/no children, number of live-in dependents, pay grade group, type of temporary lodgings, perceived effects of temporary lodging experience on attitude and selection of permanent housing and time spent in temporary lodging) were also used to predict overall satisfaction.

The analysis showed that satisfaction with the size of the residence was the most powerful single predictor of overall satisfaction in both Services ( $R = .71$  in the Army sample;  $R = .74$  in the Air Force sample). In the Army, satisfaction with security, cleanliness and play space for children also contributed to the prediction of overall satisfaction. These four variables in combination predicted overall satisfaction at the  $R = .81$  level (when the maximum possible is 1.00). In the Air Force sample, satisfaction with residence size was also the most powerful single predictor of overall satisfaction. Contributing to the prediction were satisfaction with cleanliness, cost, privacy, effects of the temporary lodging experience on attitude, presence or absence of children, number of live-in dependents, and pay grade level. Taken together, these eight variables related to overall satisfaction at the  $R = .89$  level (when the maximum possible is 1.00).<sup>10</sup>

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<sup>10</sup>It should be noted that the sample sizes in both Services for this analysis were much reduced due to selecting only those individuals who had answered all the items used in the regression. The sample sizes were 209 for the Army and 73 for the Air Force. With the exception of satisfaction with residence size, one should be cautious in accepting the relative importance of the other variables mentioned in contributing to the prediction of overall satisfaction.

Table K-18

## Satisfaction with Aspects of Temporary Lodgings (Q112-Q122)

Aspect	Responses (%)							
	Government-owned		Government-leased		Economy		Total	
	Dissat.	Sat.	Dissat.	Sat.	Dissat.	Sat.	Dissat.	Sat.
<u>Army</u>								
Q112: Personal safety/security	21.1	66.7	15.7	55.4	40.1	41.8	28.0	54.2
Q113: Privacy	43.3	45.7	30.1	55.4	38.5	38.5	39.0	44.5
Q114: Kitchen, eating, and cooking facilities <sup>a</sup>	55.3	37.9	54.5	29.5	68.6	18.2	60.7	28.5
Q115: Laundry facilities <sup>a</sup>	49.6	37.0	64.2	26.4	67.6	22.5	58.4	29.9
Q116: Cleanliness	33.5	51.5	24.1	56.6	35.6	47.5	32.6	50.8
Q117: Play space for children <sup>a</sup>	62.5	28.4	65.0	22.5	68.0	25.0	65.5	25.8
Q118: Size of quarters	54.7	32.0	61.0	28.0	64.6	26.0	59.9	28.9
Q119: Convenience of lodgings to the installation	18.7	76.0	55.6	30.9	39.4	48.3	34.2	55.9
Q120: Convenience of lodgings to government facilities	18.6	72.1	54.3	30.9	40.0	46.1	34.1	53.5
Q121: Overall comfort and adequacy of lodgings	45.3	43.5	42.2	43.4	55.6	29.8	49.1	37.7
Q122: Cost	25.7	61.4	50.0	32.4	55.4	25.7	43.8	39.7
<u>Air Force</u>								
Q112: Personal safety/security	26.2	50.0	42.1	36.8	42.9	35.1	37.7	39.9
Q113: Privacy	37.2	48.8	42.1	36.8	39.2	40.5	39.0	42.6
Q114: Kitchen, eating, and cooking facilities <sup>a</sup>	50.0	35.7	75.0	25.0	67.6	14.7	61.4	24.3
Q115: Laundry facilities <sup>a</sup>	36.7	46.7	60.0	20.0	80.0	10.0	58.6	27.1
Q116: Cleanliness	40.5	47.6	31.6	57.9	48.7	38.5	43.9	43.9
Q117: Play space for children <sup>a</sup>	64.7	23.5	100.0	0.0	76.0	16.0	75.0	16.7
Q118: Size of quarters	51.2	25.6	68.4	10.5	71.8	19.2	65.0	20.0
Q119: Convenience of lodgings to the installation	20.0	62.5	52.6	36.8	34.6	42.0	32.9	47.1
Q120: Convenience of lodgings to government facilities	22.5	57.5	52.6	36.8	38.8	37.5	36.0	43.2
Q121: Overall comfort and adequacy of lodgings	44.2	37.2	57.9	21.1	58.4	26.0	54.0	28.0
Q122: Cost	21.6	59.5	58.8	29.4	68.0	20.0	53.5	32.6

<sup>a</sup>Substantial percentages reported the feature unavailable (see Table K-17).



However, in the Air Force sample, a higher percentage were dissatisfied than satisfied with government-leased housing (48 to 31%). Ratings for perceived satisfaction of the spouse were generally similar to those for service members. The relationship between service member and spouse overall satisfaction was very high.

As to the effect of the presence of children in the household, the results for both the Army and Air Force samples showed no differences in overall satisfaction as a function of the presence or absence of children, for either the service member or the spouse.

Prediction of Overall Satisfaction. In order to investigate what variables could be used to predict overall satisfaction with the comfort and adequacy of the residence, multiple regression analyses were performed on each Service sample. Multiple regression assesses the contribution of each variable in predicting the criterion (in this case, service member overall satisfaction) with the effects of the other variables taken into account. The best combination of the predictors is determined in an equation that maximizes the predictability of the criterion.

Included as predictor variables in this analysis were all the items dealing with satisfaction with permanent housing, services, and facilities except spouse overall satisfaction (31 items), pay grade group, whether or not the service member had children living with him/her, number of live-in dependents, effects of temporary housing experiences and type of permanent housing.

Table K-28 presents the individual variables for each Service that best (in combination with the other variables) predicted overall satisfaction, in order of their predictive value. The Rs at the bottom of the tables are the multiple correlation coefficients for each Service. These indicate the degree of predictability of the criterion from the combination of the variables shown, with 1.00 the maximum value. The correlations (Rs) show that overall satisfaction responses are moderately well predicted by the combination of variables shown.

Separate analyses for residents of government-owned, government-leased, and economy and other housing were not conducted due to the small sample sizes. The multiple regression analyses were performed for those in the sample who responded to all of the questions used in the analyses, other than those who responded "Does not apply."

The variables contributing most to the prediction of overall satisfaction were specific satisfaction items concerning the residence, in contrast to the demographic and other variables used. All variables were positively related to overall satisfaction (i.e., the more satisfaction on each variable) the greater the likelihood of higher overall satisfaction. There was some commonality between the Services with size variables and convenience to government facilities among the predictors in both Services. The first variable listed carries the greatest weight in predicting overall satisfaction, contributing much more than the other variables combined. Satisfaction with appearance (neighborhood in the Army and residence in the Air Force) was one of the contributors. In each of the Services, satisfaction with one of the major operating systems of the home (heating in the Army and electrical service in the Air Force) was included. The inclusion of satisfaction with utility costs in the Air Force sample may be a function of the much larger proportion of Air Force than Army respondents living in economy housing.

Table K-28

Variables Contributing Most to Prediction (Description) of  
Overall Satisfaction with the Residence (Q57-Q87)<sup>a</sup>

Army (n = 396)	Air Force (n = 126)
Satisfaction with residence size	Satisfaction with living/dining room size
Satisfaction with neighborhood appearance	Satisfaction with external appearance of neighborhood
Satisfaction with privacy	Satisfaction with convenience of residence to government facilities
Satisfaction with convenience of residence to government facilities	Satisfaction with adequacy of electrical service
Satisfaction with adequacy of heating system (including insulation)	Satisfaction with utility costs
R = .83	R = .83

<sup>a</sup>Since the numbers on which the regression analyses were performed were much smaller than the totals in the Army (n = 740) and Air Force (n = 397) samples, due to the inclusion of only those individuals who answered all the items used, the stability of the order of the predictors can be questioned. Other items not emerging as major contributors in the analyses may also have emerged if a larger number of respondents could have been used.

#### Satisfaction with Specific Aspects of Housing, Facilities, and Services

Grouping the Satisfaction Items. A total of 33 satisfaction items (including service member and spouse overall satisfaction) were used in a factor analysis. This is a statistical method that produces groups of items that relate more highly to each other than to other groups. It produces a limited number of dimensions (factors) that account for the interrelationships among a set of items. The groupings of items define the factor. In the present situation, factor analysis was performed to look at the various dimensions involved in the concept of satisfaction as measured by the 33 items.

Table K-29 shows the major factors that emerged in each Service along with the specific variables that were most highly related to each factor (item grouping).

The factors are very similar for the two Services. Overall satisfaction with the residence is a part of the factors concerned with structural aspects of the residence (e.g., size) and the immediate physical/psychological surroundings of the residence (e.g., privacy, appearance). This implies that these dimensions of satisfaction are important parts of overall satisfaction. Facilities and services for children are part of satisfaction only for those with children. The factors are generally very clear, since the variables in each factor relate to each other logically.

Table K-29  
Groupings of Satisfaction Items (Q57-Q89)

Groupings (Items)
STRUCTURAL ASPECTS OF THE RESIDENCE (Including satisfaction with residence size, room sizes, number of rooms, and service member and spouse overall satisfaction).
SYSTEMS/FURNISHINGS (Including satisfaction with kitchen, appliances, laundry facilities, government furniture, electrical service, water purity, hot water supply, heating, and the number of bathrooms).
FACILITIES AND SERVICES FOR CHILDREN (Including satisfaction with number and availability of recreational facilities for preteens and teens, availability of child care, and transportation time for children bused to school).
LOCATION/CONVENIENCE (Including satisfaction with convenience of the residence to the installation, government facilities, medical dispensary, and major medical facilities, and accessibility of the residence to public transportation).
IMMEDIATE PHYSICAL-PSYCHOLOGICAL SURROUNDINGS (Including satisfaction with external appearance of residence, appearance of neighborhood, privacy, personal security/safety, repair and maintenance services, and service member and spouse overall satisfaction).

In summary, satisfaction is multidimensional and is composed of satisfaction with structural aspects of the residence, with systems and furnishings, with recreational and other facilities for children, with location/convenience of the residence to support facilities, and with the immediate physical/psychological surroundings of the residence.

Thirty-one items asked respondents to rate their satisfaction with specific aspects of their residences, facilities, and services. The distribution of responses to these items is arranged in descending order of the percentage dissatisfied for both Services. Data are also given for items that were applicable to most respondents (less than 10% reporting not applicable) as well as for items that were not applicable to 10 percent or more of the respondents. These latter items applied mainly to respondents living in economy housing (e.g., costs) and/or those having dependent children living with them (e.g., items dealing with childrens' facilities). Separating the two sets of items puts the percentages satisfied and dissatisfied into a more realistic perspective.

Army Responses to Satisfaction Items. Tables K-30 and K-31 show the data on the specific satisfaction items for the Army sample.

Three aspects of the residence showed the majority dissatisfied and between 15 and 19 percent greater dissatisfaction than satisfaction. These were heating systems, water purity, and convenience to major medical facilities. A large number of the other specific satisfaction items in Table K-30 show similar percentages satisfied and dissatisfied. The

majority of respondents were satisfied with the number of bathrooms and bedrooms, convenience of the residence to installation and government facilities, privacy, laundry facilities, safety/security, and accessibility of public transportation. These aspects showed differences between the percentage satisfied and dissatisfied ranging from 11 percent for bedroom size to 45 percent for accessibility of public transportation.

Table K-30

Satisfaction with 22 Aspects of Housing, Facilities, and Services (Q57-Q87): Army

Housing/Facility/Service Aspect	Responses (%)			
	N/A	Dissatisfied	Neutral	Satisfied
Q69: Heating system adequacy	1.0	52.7	9.3	37.0
Q67: Water purity	1.1	52.6	12.4	33.9
Q84: Convenience of residence to major medical facilities	0.8	51.3	11.4	36.5
Q59: Living/dining room size	2.1	45.0	8.6	44.3
Q57: Overall size of residence	0.4	43.8	7.1	48.8
Q72: Maintenance/repair services on residence	5.3	42.4	14.1	38.1
Q68: Hot water supply	1.7	40.4	8.5	49.4
Q58: Bedroom size(s)	0.6	40.1	7.9	51.4
Q83: Convenience of residence to medical dispensary/clinic	0.4	38.4	13.6	47.6
Q66: Adequacy of electric service	1.3	38.4	13.8	46.5
Q76: Neighborhood appearance	0.4	38.0	19.5	42.1
Q62: Operating condition of kitchen appliances	4.9	37.3	12.7	45.1
Q75: External appearance of residence	0.4	37.2	18.2	44.2
Q73: Personal safety/security	0.3	36.3	11.6	51.8
Q82: Convenience of residence to government facilities	0.4	35.0	13.8	50.7
Q63: Number of kitchen appliances furnished	8.8	33.8	11.5	45.9
Q60: Number of bedrooms	0.6	33.3	10.2	56.0
Q81: Convenience of residence to installation	1.1	31.2	14.3	53.3
Q74: Degree of privacy	0.3	31.0	15.5	53.3
Q64: Laundry facility adequacy	7.7	30.0	9.2	53.1
Q61: Number of bathrooms	0.8	26.2	8.2	64.8
Q87: Accessibility to public transportation	2.5	15.8	20.9	60.8

Table K-31

Satisfaction with Aspects Not Applicable to 10 Percent  
or More of the Respondents (Q57-Q87): Army

Housing/Facility/Service Aspect	Responses (%)			
	N/A	Dissatisfied	Neutral	Satisfied
Q78: Number/availability of recreation for preteens	17.7	42.9	10.5	28.9
Q65: Availability/quality of government furniture	16.8	42.4	16.6	24.2
Q77: Number/availability of recreation for teens	30.4	37.1	10.7	21.8
Q79: Convenience of residence to playgrounds	13.5	32.9	11.7	41.8
Q80: Convenience of residence to youth activity centers	17.3	29.6	12.6	40.6
Q71: Housing costs	38.3	27.0	10.5	24.2
Q85: Availability of child care services/facilities	23.6	26.8	16.5	33.2
Q70: Utility costs	43.6	19.5	11.7	25.1
Q86: Transportation time for children bused to school	34.6	16.9	14.4	34.1

Among the items not applicable to many of the respondents, the greatest amount of dissatisfaction was expressed with number and availability of recreational facilities for preteens and teens and with the availability and quality of government furniture. Most of the other items showed relatively equal percentages satisfied and dissatisfied. Somewhat higher percentages were satisfied than dissatisfied with transportation time for children bused to school and, to a lesser degree, convenience of the residence to playgrounds and youth activity centers.

Pay grade group showed relationships to most of the satisfaction items. In general, the E-4 to E-6 (and the small number of E-1 to E-3) respondents who answered the items were the most dissatisfied of all the pay grade groups. On the other hand, senior officers were more satisfied than all other pay grade groups with more than half of the 31 items. Differences between the E-4 to E-6 group and the other pay grades, especially senior officers, often were very large. The levels of dissatisfaction for the E-4 to E-6 group were greatest for the following aspects: number of bathrooms, operating systems in the residence, security, convenience to the installation and support facilities, child care, and transportation time for children bused to school.

Table K-32 shows the percentages of respondents satisfied and dissatisfied with aspects of their housing, facilities, and services by the three major housing types.

Table K-32

Satisfaction with Aspects of Housing, Facilities, and Services (Q57-Q87) by Housing Type (Q44): Army

Item	Responses (%)					
	Government-owned (n = 174)		Government-leased (n = 270)		Economy (n = 213)	
	Dissat.	Sat.	Dissat.	Sat.	Dissat.	Sat.
Q57: Overall size of residence	29.3	64.9	49.6	45.2	47.0	43.7
Q58: Bedroom size(s)	23.6	66.1	41.5	53.3	49.8	40.5
Q59: Living/dining room size	18.4	68.4	49.4	43.1	58.1	31.2
Q60: Number of bedrooms	37.4	56.3	26.7	63.7	40.5	46.5
Q61: Number of bathrooms	10.9	80.5	21.5	73.7	46.0	39.9
Q62: Operating condition of kitchen appliances	26.8	61.5	31.4	54.2	52.8	21.3
Q63: Number of kitchen appliances furnished	27.4	60.3	17.3	69.0	60.2	6.5
Q64: Adequacy of the laundry facilities	11.7	76.5	12.2	76.0	67.6	6.0
Q65: Availability/quality of government furniture <sup>a</sup>	35.8	38.0	40.2	29.9	49.1	6.9
Q66: Adequacy of electrical service	28.7	59.8	31.9	54.8	53.5	27.4
Q67: Purity of the water	32.8	51.7	47.4	40.7	75.8	11.6
Q68: Hot water supply	14.4	77.0	32.2	59.3	71.4	15.0
Q69: Adequacy of heating system (including insulation)	47.1	42.5	43.7	46.7	70.7	20.0
Q70: Cost of utilities <sup>a</sup>	0.6	30.7	1.8	20.7	57.9	26.4
Q71: Cost of housing <sup>a</sup>	8.9	28.5	11.1	19.6	63.4	26.9
Q72: Maintenance/repair services on residence	22.9	62.0	50.6	31.0	48.1	27.8
Q73: Personal safety/security	8.6	83.9	44.1	44.1	48.8	36.3
Q74: Degree of privacy	17.2	68.4	39.6	45.9	32.6	51.6
Q75: External appearance of the residence	24.7	59.8	52.2	31.5	28.8	48.8
Q76: Appearance of the neighborhood	12.1	71.8	46.3	31.1	49.3	33.5
Q77: Number/availability of recreational facilities for teenage children <sup>a</sup>	23.5	39.7	42.4	22.1	41.9	6.5
Q78: Number/availability of recreational facilities for preteen children <sup>a</sup>	24.6	40.8	43.9	36.9	57.4	9.7
Q79: Convenience of residence to playgrounds <sup>a</sup>	10.6	64.2	29.2	51.7	55.8	12.9
Q80: Convenience of residence to youth activity centers <sup>a</sup>	7.8	69.3	23.6	48.0	53.5	7.8
Q81: Convenience of residence to the installation	8.6	81.6	51.1	31.9	25.6	60.5
Q82: Convenience of residence to government facilities	8.0	85.6	41.5	39.6	48.4	38.1
Q83: Convenience of residence to medical dispensary/clinic	5.7	87.9	55.6	27.4	42.3	42.8
Q84: Convenience of residence to major medical facilities	30.5	62.6	57.4	25.6	56.7	32.6
Q85: Availability of child care services and facilities <sup>a</sup>	17.9	37.4	14.4	46.5	47.9	15.7
Q86: Transportation time for children bused to school <sup>a</sup>	3.9	46.4	17.4	46.7	26.3	10.1
Q87: Accessibility of public transportation	8.9	63.7	17.7	63.1	18.9	58.1

<sup>a</sup>Not applicable to 10 percent or more of the respondents.

Satisfaction with a few items was differentiated as a function of whether or not the service members had children living with them. Service members with children were more satisfied than those without children with number of bathrooms, kitchen appliances, laundry facilities, water purity, hot water supply, and heating systems. These differences, however, are probably much more a function of the type of housing than the presence or absence of children. A higher proportion of service members with children lived in government-owned versus economy housing. Those without children were more satisfied than those with children with privacy and the external appearance of their residence.

Type of housing strongly and very consistently differentiated satisfaction on almost all the 31 items measured. Service members living in government-owned housing were more satisfied than those in economy housing. This was true of all but one of the satisfaction items. Residents of government-owned housing much more often reported being very satisfied, while those in economy housing more often reported being very dissatisfied. Residents of government-owned housing were more satisfied than those in economy housing on some items and similar to those in government-owned housing. Residents of government-owned housing were more satisfied than those in government-owned housing with size, water purity, hot water supply, residence and neighborhood appearance, safety and security, privacy, maintenance and repair services, recreational facilities for children, utility costs, convenience to installation and government facilities, and the busing time for their children. These differences, however, were not as strong as the differences between respondents living in government-owned and economy housing.

Air Force Responses to Satisfaction Items. Tables K-33 and K-34 present data on individual satisfaction items for Air Force respondents.

Responses to these items showed a majority dissatisfied with size of the residence as well as the size of the living/dining room, convenience to major medical facilities, and various systems in the residence. There was a very high level of dissatisfaction with the purity of the water (nearly 75%). In addition to the items for which a majority were dissatisfied, a higher percentage were dissatisfied than satisfied (by 10% or more) with maintenance and repair services. A majority of respondents were satisfied with convenience of their residences to the installation and government facilities, medical clinics (not major medical facilities), and public transportation. In addition to those items showing relatively high satisfaction, a higher percentage were also more satisfied than dissatisfied (by more than 10%) with the number of bathrooms and external appearance of the residence.

There was a high degree of dissatisfaction with all but two of the items listed above. Close to equal percentages of satisfaction and dissatisfaction were reported for operating condition of kitchen appliances and utility costs. More dissatisfaction than satisfaction was expressed for number and availability of recreation facilities for preteens and teens, laundry facilities, government furniture, number of kitchen appliances furnished, housing costs, availability of child care, and transportation time for children bused school.

Pay grade group showed statistically reliable relationships to a majority of the aspects of satisfaction measured. For most of these aspects, officers (especially senior officers) were more satisfied than the lower grade enlisted personnel (E-1 to E-6). For many of the items, the senior enlisted personnel were also more satisfied than the E-1 to E-6 respondents. A notable exception was satisfaction with overall residence size. The E-4 to E-6 group was more satisfied than the senior officer group with residence size, although all pay grade groups showed average ratings on the dissatisfied side of the scale.

Table K-33

Satisfaction with 19 Aspects of Housing, Facilities,  
and Services (Q57-Q87): Air Force

Housing/Facility/Service Aspect	Responses (%)			
	N/A	Dissatisfied	Neutral	Satisfied
Q67: Water purity	0.3	73.6	8.7	17.4
Q59: Living/dining room size	1.3	67.4	10.3	20.9
Q69: Heating system adequacy	0.0	63.3	10.3	26.4
Q57: Overall size of residence	0.0	63.3	8.7	28.0
Q84: Convenience of residence to major medical facilities	0.8	63.0	12.4	23.7
Q58: Bedroom size(s)	0.3	59.1	9.2	31.4
Q68: Hot water supply	0.5	53.7	9.8	36.0
Q66: Adequacy of electric service	0.8	51.5	15.6	32.2
Q73: Personal safety/security	0.0	44.3	17.4	38.3
Q72: Maintenance/repair services on residence	5.8	43.7	18.4	32.1
Q76: Neighborhood appearance	0.0	40.9	26.6	32.4
Q60: Number of bedrooms	0.8	39.9	17.4	42.0
Q74: Degree of privacy	0.0	39.3	19.5	41.1
Q61: Number of bathrooms	0.0	33.5	17.3	49.2
Q82: Convenience of residence to government facilities	0.3	30.4	16.1	53.3
Q75: External appearance of residence	0.0	28.8	24.5	46.7
Q83: Convenience of residence to medical dispensary/clinic	0.3	28.0	17.9	53.8
Q81: Convenience of residence to installation	1.3	25.1	17.4	56.2
Q87: Accessibility to public transportation	1.6	17.1	21.6	59.6



Table K-34

Satisfaction with Aspects Not Applicable to 10 Percent  
or More of the Respondents (Q57-Q87): Air Force

Housing/Facility/Service Aspect	Responses (%)			
	N/A	Dissatisfied	Neutral	Satisfied
Q64: Laundry facility adequacy	10.8	50.6	5.8	32.7
Q65: Availability/quality of government furniture	15.9	48.9	18.8	16.4
Q78: Number/availability of recreation for preteens	29.3	48.3	11.1	11.3
Q63: Number of kitchen appliances furnished	18.2	46.2	9.2	26.3
Q85: Availability of child care services/facilities	30.0	44.2	13.7	12.1
Q79: Convenience of residence to playgrounds	22.7	43.6	8.4	25.3
Q62: Operating condition of kitchen appliances	12.4	41.0	10.3	36.3
Q77: Number/availability of recreation for teens	45.4	39.0	9.2	6.3
Q71: Housing costs	20.5	38.7	19.7	21.1
Q80: Convenience of residence to youth activity centers	27.5	35.7	14.6	22.2
Q70: Utility costs	27.4	30.0	18.2	24.5
Q86: Transportation time for children bused to school	55.4	21.9	13.7	9.0

Officers and/or senior enlisted respondents were generally more satisfied than the lower grade enlisted respondents with furnishings and operating systems of the residence, recreational facilities for teens and preteens, and convenience of the residence to facilities, services, and the installation. Surprisingly, based on the preponderance of items for which the officers and senior level enlisted personnel were more satisfied than the lower enlisted grades, there was no statistical relationship between pay grade and overall satisfaction. In fact, there was a slight tendency for senior officers to be less satisfied than most of the other pay grade groups.

The presence or absence of children in the home was not related to most of the satisfaction items. Since a large majority of respondents without children reported the items dealing with children as not applicable, analyses of these items would not be meaningful.

Table K-35 shows the percentages of Air Force respondents dissatisfied and satisfied with aspects of their housing, facilities, and services by the three major housing types.

Table K-35

Satisfaction with Aspects of Housing, Facilities, and Services (Q57-Q87) by Housing Type (Q44): Air Force

Item	Responses (%)					
	Government-owned (n = 44)		Government-leased (n = 77)		Economy (n = 222)	
	Dissat.	Sat.	Dissat.	Sat.	Dissat.	Sat.
Q57: Overall size of residence	54.5	40.9	72.7	20.8	59.9	29.7
Q58: Bedroom size(s)	50.0	45.5	62.3	26.0	60.8	30.5
Q59: Living/dining room size	43.2	45.5	78.9	10.5	67.1	20.3
Q60: Number of bedrooms	31.8	56.8	33.8	44.2	43.9	38.0
Q61: Number of bathrooms	20.5	70.5	18.2	70.1	44.3	35.2
Q62: Operating condition of kitchen appliances <sup>a</sup>	34.1	65.0	26.0	57.1	51.4	20.3
Q63: Number of kitchen appliances furnished <sup>a</sup>	34.1	59.1	15.6	63.6	62.6	3.6
Q64: Adequacy of the laundry facilities <sup>a</sup>	11.4	84.1	11.7	75.3	77.5	2.7
Q65: Availability/quality of government furniture <sup>a</sup>	36.4	38.6	37.7	28.6	57.5	5.9
Q66: Adequacy of electrical service	31.8	56.8	50.6	39.0	55.4	25.7
Q67: Purity of the water	38.6	47.7	55.8	32.5	86.9	6.3
Q68: Hot water supply	15.9	77.3	22.1	70.1	75.1	12.2
Q69: Adequacy of heating system (including insulation)	36.4	54.5	37.7	50.6	82.4	9.5
Q70: Cost of utilities <sup>a</sup>	0.0	25.0	3.9	15.6	49.1	28.8
Q71: Cost of housing <sup>a</sup>	25.0	18.2	14.3	14.3	50.5	25.7
Q72: Maintenance/repair services on residence	29.5	43.2	37.7	44.2	48.2	26.1
Q73: Personal safety/security	22.7	72.7	19.5	63.6	58.6	22.1
Q74: Degree of privacy	31.8	45.5	40.3	40.3	41.0	39.6
Q75: External appearance of the residence	20.5	52.3	31.2	44.2	32.0	46.8
Q76: Appearance of the neighborhood	11.4	59.1	28.6	45.5	55.0	20.7
Q77: Number/availability of recreational facilities for teenage children <sup>a</sup>	27.3	27.3	44.2	10.4	38.3	1.4
Q78: Number/availability of recreational facilities for preteen children <sup>a</sup>	31.8	34.1	41.6	20.8	54.1	4.5
Q79: Convenience of residence to playgrounds <sup>a</sup>	18.2	61.4	15.6	61.0	60.8	5.0
Q80: Convenience of residence to youth activity centers <sup>a</sup>	11.4	59.1	11.7	45.5	50.7	5.0
Q81: Convenience of residence to the installation	11.4	79.5	29.9	62.3	27.9	47.3
Q82: Convenience of residence to government facilities	2.3	86.4	24.7	67.5	41.9	37.4
Q83: Convenience of residence to medical dispensary/clinic	4.5	90.9	24.7	63.6	36.5	39.2
Q84: Convenience of residence to major medical facilities	34.1	56.8	62.3	23.4	67.6	18.0
Q85: Availability of child care services and facilities <sup>a</sup>	27.3	22.7	33.8	24.7	50.0	7.2
Q86: Transportation time for children bused to school <sup>a</sup>	18.2	18.2	33.8	13.0	18.0	6.3
Q87: Accessibility of public transportation	13.6	63.6	18.2	61.0	18.0	57.7

<sup>a</sup>Not applicable to 10 percent or more of the respondents.

Type of housing was a consistent and statistically powerful determinant of satisfaction for 24 of the 31 items. Residents of government-owned housing were more satisfied than those in economy housing on 23 of the 24 items. Those residing in government-leased housing were also more satisfied than those in economy housing on 18 of the items. There were a few aspects of satisfaction for which there was greater satisfaction for those in government-owned housing than for service members in both government-leased and economy housing. Size of residence showed greater satisfaction for residents of government-owned housing compared to those in government-leased housing, but no statistical difference compared to those in economy housing. Residents of economy housing tended to show average ratings on the negative side of the scale, while those in government-leased or government-owned housing were on the positive side of the scale. Some of the strongest differences were expressed for items dealing with furnishings and operating systems, as well as convenience to facilities and services.

### Usage of Facilities

A series of items addressed the reliance of service members and their families on government and economy facilities by asking their typical level of usage and whether or not the facilities were available. Usage was categorized as always or mostly use economy facilities, use about half economy and half government, and mostly or always use government facilities. Of the nine types of facilities asked about, only two (school and child care facilities) were reported to be unavailable by a meaningful percentage of the respondents. Approximately 12 percent of the Air Force sample reported school facilities unavailable, compared to less than 5 percent of the Army sample. Regarding child care facilities, 15.8 percent of the Army and 56.5 percent of the Air Force reported they were not available.

Table K-36 shows usage for the nine listed facilities by members of each Service. The percentages are based on the number of respondents who answered each item, excluding those who reported it as not available.

For all the listed facilities except for nonfood shopping, the large majority of those who responded to the items (i.e., did not report it as unavailable) relied mostly or always on U.S. government facilities in both Services. Nonfood shopping facilities had a large percentage reporting half economy and half government facilities. Less than 15 percent in each Service reported always or mostly using economy facilities for any of the listed facilities except nonfood shopping and child care in the Air Force. The latter was based on a very small sample as many said the item did not apply to them and many reported the facilities as not available. Mixed use of economy and government facilities occurred most often for food and nonfood shopping, entertainment, and recreational facilities. In general, service members relied heavily on U.S. government facilities for food, medical/dental care, schools, recreation and entertainment, religious facilities, libraries, and child care (where available).

Pay grade was related to facilities usage for many of the listed facilities for each Service. In general, the enlisted grades and Army warrant officers were less likely than officers to report always using government facilities. For a few facilities, the enlisted respondents were slightly more likely than officers to report half economy and half government usage. The relationship of facilities usage to pay grade is a reflection of having a local national spouse, which is more common among the enlisted and warrant officer respondents.

Table K-36  
Usage of Economy and Government Facilities

Facilities	Army		Air Force		Total	
	Enlisted	Officer	Enlisted	Officer	Enlisted	Officer
Q90: Food shopping facilities						
Economy	2.5	0.7	5.2	1.0	3.8	0.8
Half and half	32.5	11.3	30.6	8.7	31.6	10.8
Government	65.0	87.9	64.2	90.4	64.6	88.4
Q91: Nonfood shopping facilities						
Economy	26.1	14.3	26.0	26.9	26.1	16.8
Half and half	43.5	43.0	39.9	38.5	41.7	42.1
Government	30.4	42.7	34.1	34.6	32.2	41.1
Q92: Medical/dental facilities						
Economy	1.8	1.4	0.7	1.9	1.3	1.5
Half and half	6.1	1.9	7.4	1.0	6.7	1.7
Government	92.1	96.7	91.9	97.1	92.0	96.8
Q93: School facilities						
Economy	9.3	3.0	1.9	1.4	6.3	2.7
Half and half	4.0	2.1	3.9	0.0	4.0	1.7
Government	86.7	94.8	94.2	98.6	89.7	95.5
Q94: Recreation (sports) facilities						
Economy	9.0	4.1	4.7	1.0	6.8	3.5
Half and half	21.5	16.5	21.6	13.6	21.5	15.9
Government	69.5	79.4	73.7	85.4	71.6	80.6
Q95: Entertainment (theatres, etc.) facilities						
Economy	10.0	4.3	9.3	4.8	9.7	4.4
Half and half	30.5	20.0	31.5	16.3	31.0	19.3
Government	59.5	75.7	59.3	78.8	59.4	76.3
Q96: Religious facilities						
Economy	14.8	9.9	15.2	7.5	15.0	9.4
Half and half	13.5	4.4	13.0	11.8	13.3	5.9
Government	71.7	85.7	71.7	80.6	71.7	84.6
Q97: Library facilities						
Economy	1.5	0.5	0.8	1.0	1.1	0.6
Half and half	6.2	1.4	2.3	1.0	4.3	1.3
Government	92.4	98.1	96.9	98.1	94.6	98.1
Q98: Child care facilities						
Economy	18.7	8.3	26.4	14.3	21.0	9.0
Half and half	3.3	5.7	9.4	14.3	5.1	6.6
Government	78.0	86.0	64.2	71.4	73.9	84.4

## Use and Satisfaction with Government-furnished and Loaner Furniture

Beyond the single satisfaction item on government furniture in the list of 31 aspects of housing, facilities, and services, service members were asked to respond to five items concerning their opinions toward government furnished and loaner furniture.

### Government-furnished Furniture (Q99-Q100)

The vast majority of respondents in both Services (84% Army and 90% Air Force) were using all or mostly all their own furniture. Enlisted service members were more likely to be using all their own furniture than officers in both Services. The senior officers in the Army sample and both commissioned officer groups in the Air Force were more likely than enlisted respondents to report using mostly their own furniture. Over 81 percent of the respondents, in both Services, preferred using all or mostly their own furniture.

### Loaner Furniture

Opinions about loaner furniture were analyzed for all those who answered the questions, including individuals with and without experience with it. Results are shown in Table K-37.

Table K-37  
Opinions of Loaner Furniture (Q101-Q103)

Opinion	Responses (%)		
	Army	Air Force	Total
Q101: Adequacy of the quantity of loaner furniture received while awaiting arrival of their own	(n = 434)	(n = 183)	(n = 617)
Less than needed	30.2	32.2	30.8
Adequate	62.0	57.9	60.8
More than needed	7.8	9.8	8.4
Q102: Satisfaction with the condition of the loaner furniture	(n = 430)	(n = 177)	(n = 607)
Dissatisfied	45.1	45.8	45.3
Neither dissatisfied nor satisfied	16.3	21.5	17.8
Satisfied	38.6	32.8	36.9
Q103: Appropriateness of the size of the loaner furniture provided	(n = 425)	(n = 177)	(n = 602)
Too small	17.2	6.2	14.0
About the right size	75.3	83.1	77.6
Too large	7.5	10.7	8.5

The majority in both Services believed that loaner furniture was adequate in terms of quantity and size, with about a third saying that less was furnished than needed. Large majorities in each Service expressed the opinion that the furniture was the correct size. Almost one-half of those responding to the items reported dissatisfaction with the condition of the loaner furniture, with about another third reporting satisfaction.

In both Services, the enlisted service members (and warrant officers in the Army) were more likely than officers to report furniture as too small and the quantity was less than needed. Pay grade was not clearly related to opinions about the condition of the loaner furniture.

## **PROBLEMS**

### Reporting of Problem Areas

Respondents were asked to pick, from a list of 21, the 3 most serious problems (in rank order of seriousness) encountered by them and their families at their present location. Table K-38 shows, by Service, the percentage who chose each of the problems as their first, second, or third most serious. One would expect an average of 14 percent (3 choices in 21) for each problem if choices were made randomly. Thus, percentages of about 18 percent or more, or 10 percent or less, are statistically meaningful in terms of expectations based on random choice. Higher and lower percentages indicate definite trends toward choice or nonchoice of a problem by the samples.

Table K-38 demonstrates differences as well as similarities between the two Services. Permanent housing was the most frequently selected problem among the three most serious problems. Initial housing costs, medical/dental care, and transportation were also frequently selected by both Services to an extent that implies nonrandomness in responses and commonality among service members. In the Army sample, the problem of language and cultural differences was frequently selected, but this was not a common problem in the Air Force sample. In the Air Force sample, local telephone service and security were more common problems than in the Army.

Areas that were not among the most serious problems in both services included schools, separation, and related problems because of unaccompanied status, vehicles, and utility service (other than costs). The most frequently selected problems dealt with permanent housing, transportation, communication (language and cultural differences, local telephone service), and medical/dental care.

### Differences by Pay Grade Group, Housing Type, and Household Composition

Army. Table K-39 shows the percent of each pay grade group reporting problems that were selected by at least 14 percent of all the respondents. The percentage next to each problem's title is the percentage of all respondents reporting that problem.

The enlisted grades (the E-1 to E-3 group will not be discussed because of the small number) were somewhat more concerned with medical/dental care than the officers. Commissioned officers more frequently reported language and cultural differences than enlisted personnel. All officer groups found shipping and storing household goods a more serious problem than the enlisted service members. Junior officers were slightly more likely to report permanent housing among their three most serious problems than the other pay grade groups, with almost 50 percent choosing this problem. Senior officers chose

## Policy Proposals Affecting Allowances for Government Housing

### Overall Responses by Service

The four proposals to be discussed dealt with utility usage, allowances for maintenance/repair done by the service member, getting more bedrooms in exchange for payment in addition to their BAQ, and choosing to have fewer bedrooms in order to retain part of their BAQ. Table K-47 presents the distribution of responses of these four proposals by enlisted/officer responses. The rank order of the proposals are in terms of the percentage in favor, with enlisted and officer responses combined.

The majority in both Services (58 to 70%) were in favor of the two proposals that would provide them extra money--allowances for making repairs and payment for living in housing with fewer bedrooms than they were qualified to have. The proposal concerning utility allowances (retain amount not used, pay for amount used over the allowance) received approximately 50 percent favorable responses in both services, with 31 to 38 percent opposed. The proposal with the highest percentage in opposition concerned allowing "buying" more bedrooms than the service member was qualified to have (55 to 59% opposed).

### Differences by Pay Grade, Housing Type, and Household Composition

In the discussion of each choice-allowance proposal that follows, group mean responses are considered negative if they fall below 3.0 (somewhat to very opposed) and positive if they are above 3.0 (somewhat to very much in favor). Household composition is defined here as with or without children.

#### Proposal 7 (Q133): Provide an Annual Utility Allowance (Based on Family Size, Housing Size, and Location) Allowing Retention of Any Amount Not Spent on Utilities and Requiring Out-of-pocket Payment for Any Amount Over the Allowance.

##### Army

This proposal ranked third among the four choice-allowance proposals (enlisted 51.9% in favor, officers 44.6% in favor). E-1 to E-6 and O-1 to O-3 respondents generally favored the proposal (means 3.2 to 3.8) compared to the somewhat negative response means of the E-7 to E-9, W-1 to W-4, and O-4 to O-6 respondents (2.7 to 2.9). No significant pay grade group differences were found. Residents of government-owned and economy housing favored the proposal more than those living in government-leased housing. Respondents without children in their households favored it more than those with children.

##### Air Force

As in the Army sample, this proposal was third in popularity (enlisted 52.6% in favor, officers 45.2% in favor). All pay grade group means were positive (3.1 to 3.6) except for the senior enlisted and senior officer groups (both 2.8). No significant differences were found by pay grade group. Residents of economy housing favored the proposal more than those living in government controlled housing. No differences were found by household composition.

### Air Force

This was the least popular of the six assignment proposals (enlisted: 20.4% in favor, 65.4% opposed; officers: 17.5% in favor, 69.9% opposed). Only the E-1 to E-3 group mean was positive (3.1) compared to all other pay grades (1.8 to 2.4). The E-1 to E-3 group was significantly more in favor of the proposal than E-7 to E-9s and O4 to O-6s. No differences were found by current housing type or household composition.

Proposal 5 (Q131): Extend Eligibility for Government Family Housing to Personnel (With Dependents) in Pay Grades E-1 to E-3 and E-4 (2 Years or Less Service) Even if Time on the Waiting List Increases For Everyone Else.

### Army

This proposal ranked fourth in popularity among enlisted respondents (28.6% in favor, 61.2% opposed) and fifth among officers (16.9% in favor, 73.5% opposed). Group means were all negative (1.8 to 2.4) except for the E-1 to E-3s (3.3). E-1 to E-3 respondents were significantly more in favor than E-7 to E-9s and O-4 to O-6s. E-4 to E-6 respondents were also more in favor than O-4 to O-6s. Residents of economy housing favored the proposal more than those in government-owned or government-leased housing. No differences were found by household composition.

### Air Force

This proposal ranked fourth among enlisted respondents (34.4% in favor, 51.6% opposed) and fifth among officers (24.3% in favor, 66.0% opposed). The E-1 to E-3 group mean was positive (3.5) compared to all others that were negative (2.0 to 2.7). E-1 to E-6 respondents were significantly more in favor of the proposal than senior enlisted and senior officer respondents. Residents of economy housing favored the proposal more than those living in government-owned or government-leased housing. No differences were found by household composition.

Proposal 6 (Q132): Make No Change to the Existing Assignment Procedures For Government Family Housing.

### Army

Retention of current housing assignment procedures ranked fifth among enlisted respondents (27.5% in favor, 53.0% opposed) and fourth among officers (31.1% in favor, 53.0% opposed). All group means were negative (1.9 to 2.8), with the only significant difference found being the greater opposition of E-4 to E-6 respondents than O-4 to O-6 respondents. Residents of government-owned housing were significantly more in favor of the proposal than those living in government-leased or economy housing. No differences were found by household composition.

### Air Force

This proposal ranked fifth among the enlisted (24.0% in favor, 58.1 opposed) and fourth among officers (30.4% in favor, 54.9% opposed). All pay grade group means were negative (1.5 to 2.8), with the E-1 to E-6 respondents more opposed than the senior enlisted and senior officer groups. Residents of government-owned housing favored the proposal more than those in government-leased or economy housing. No differences were found by household composition.



government-owned or government-leased housing. No differences were evident by household composition.

Proposal 2 (Q128): Assign Government Family Housing Solely on the Basis of Bedroom Requirements, But Retain Designated Officer and Enlisted Housing.

Army

This was the most popular of the six assignment proposals (enlisted: 61.2% in favor, officers 70.8% in favor). All pay grade group means were positive (3.4 to 4.1) except for the E-1 to E-3 respondents (2.9). Warrant officers and O-1 to O-3 commissioned officers favored the proposal significantly more than the E-7 to E-9 respondents. No differences were found as a function of current housing type. Respondents with children in their household favored the proposal significantly more than those without children.

Air Force

This proposal ranked third in popularity among enlisted respondents (49.1% in favor), but first among the officers (62.4% in favor). Pay grade group means varied from 2.8 to 3.8, but no groups were significantly different. No differences were found by current housing type or household composition.

Proposal 3 (Q129): Construct Family Housing For Personnel (With Dependents) in Pay Grades E-1 to E-3 and E-4 (2 Years or Less Service).

Army

This proposal ranked third in popularity overall, but with considerable opposition (enlisted: 48.8% in favor, 41.9% opposed; officers: 37.4% in favor, 51.5% opposed). All pay grade group means were on the negative side of the scale (2.6 to 2.9) with the exception of the E-1 to E-3s (4.3). E-1 to E-3 respondents were significantly more in favor than E-7 to E-9s, W-1 to W-4s, and O-4 to O-6s. No differences were found by current housing type or household composition.

Air Force

This proposal was the second most popular of the six concerning housing assignment (enlisted, 53.3% in favor; officers, 48.5% in favor). Pay grade group means of E-1 to E-6 and O-1 to O-3 respondents were positive (3.1 to 4.1); group means of E-7 to E-9 and O-4 to O-6 respondents were negative (2.7 to 2.8). No differences were found by current housing type or household composition.

Proposal 4 (Q130): Construct Family Housing for Personnel (With Dependents) in Pay Grades E-1 to E-3 and E-4 (2 Years or Less Service) Even if it Delays Construction of All Other Government Family Housing.

Army

This proposal was the least popular of the six concerning housing assignment (enlisted: 25.0% in favor, 63.0% opposed; officers: 16.7% in favor, 74.4% opposed). Pay grade group means were negative (1.8 to 2.1) except the E-1 to E-3s (3.6) who were significantly more in favor than all other groups. No differences were found by current housing type or household composition.

There were some differences between Services. Army respondents were less in favor than Air Force respondents of extending eligibility and constructing government family housing for the E-1 to E-3s and E-4s with less than 2 years of service. The majority of Air Force respondents were in favor of these two proposals, while approximately equal percentages were in favor and opposed in the Army sample. Assignment of government family housing on the basis of bedroom requirements alone while retaining designated officer and enlisted housing received majority support in both Services, with somewhat higher favorability in the Army.

When the eligibility extension and construction proposals for the E-1 to E-3s and E-4s with less than 2 years service were presented with negative consequences for others (construction delays and increases in waiting time), the percent in favor declined dramatically (by 22 to 32%) in both services and the corresponding percentage opposed increased. The proposal for no change in existing assignment procedures was opposed by the majority in the Air Force and by almost 50 percent in the Army. Only 26 to 30 percent were in favor of making no changes.

It is of interest to note the strength of the opinions. For the two proposals that included negative consequences of extending eligibility and constructing family housing for those now ineligible, a much higher percentage of those opposed rated the item strongly opposed than somewhat opposed. This difference did not occur for the other items nor did those who were in favor of these and other items show as large a difference between strongly and somewhat favor.

#### Differences by Pay Grade Group, Housing Type, and Household Composition

In the discussion of each proposal that follows, group response means are considered negative if they fall below 3.0 and positive if they are above 3.0 on the 5-point response scale. Household composition is defined here as with or without children.

#### Proposal 1 (Q127): Extend Eligibility for Assignment to Government Family Housing to All Service Members With Dependents, Regardless of Pay Grade.

##### Army

This extension proposal was second in popularity out the six related to housing assignment with enlisted and officer responses combined. However, a considerable difference was found between the two groups (enlisted: 55.8% in favor, 33.6% opposed; officers: 37.8% in favor, 53.8% opposed). Only the E-1 to E-6 pay grade group means were positive (3.6 to 4.3) compared to all other groups (2.6 to 3.0). The E-1 to E-6 respondents were significantly more positive than the O-1 to O-6 respondents. By current housing type, residents of economy housing were significantly more in favor of the proposal than those living in government-owned or government-leased housing. No differences were found by household composition.

##### Air Force

This proposal was the most popular of the six concerning housing assignment among enlisted respondents (65.0% in favor), but only third among officers (41.2% in favor). Only the group means of the E-1 to E-6 and O-1 to O-3 respondents were positive (3.5 to 4.7) compared to E-7 to E-9 and O-4 to O-6 respondents (2.5 to 3.0). E-1 to E-6 respondents were significantly more in favor than E-7 to E-9s and O-4 to O-6s, with the O-1 to O-3 officers in the middle. Residents of economy housing were more in favor than those in

Table K-46

## Responses to Policy Proposals Affecting Assignment to Government Housing (Q127-Q132)

Proposal	Rank	Army (%)						Air Force (%)						
		In Favor		Undecided		Opposed		In Favor		Undecided		Opposed		
		Enl.	Off.	Enl.	Off.	Enl.	Off.	Enl.	Off.	Enl.	Off.	Enl.	Off.	
Q127: Extend eligibillity for assignment to government family housing to all service members with dependents, regardless of pay grade	2	55.8	37.8	10.6	8.5	33.6	53.8	1	65.0	41.2	7.7	13.7	27.4	45.1
Q128: Assign government family housing solely on the basis of bedroom requirements, but retain designated officer and enlisted housing.	1	61.2	70.8	11.7	5.9	27.0	23.3	2	49.1	62.4	16.1	11.9	34.8	25.7
Q129: Construct family housing for personnel (with dependents) in pay grades E-1 to E-3 and E-4 (2 years or less service).	3	48.8	37.4	9.8	11.1	41.4	51.5	3	53.3	48.5	11.5	11.7	35.2	39.8
Q130: Construct family housing for personnel (with dependents) in pay grades E-1 to E-3 and E-4 (2 years or less service), even if it delays construction of all other government family housing.	6	25.0	16.7	12.0	8.9	63.0	74.4	6	20.4	17.5	14.1	12.6	65.4	69.9
Q131: Extend eligibility for government family housing to personnel (with dependents) in pay grades E-1 to E-3 and E-4 (2 years or less service), even if time on the waiting list increases for everyone else.	5	28.6	16.9	10.2	9.5	61.2	73.5	4	34.4	24.3	13.9	9.7	51.6	66.0
Q132: Make no change to the existing assignment procedures for government family housing.	4	27.5	31.1	19.5	22.0	53.0	46.9	5	24.0	30.4	17.8	14.7	58.1	54.9

Table K-45

## "Most Important" Improvement by Service (Q123)

Improvement	Responses (%)	
	Army	Air Force
Family housing	42.6	37.8
Troop barracks, dorms	13.2	8.4
Commissaries	12.3	12.2
Medical facilities	9.5	15.2

The areas most frequently selected as most important were the same in both Services. The overwhelming choice in each Service was family housing. Troop barracks/dorms, commissaries and medical facilities were also frequently selected as needing construction, expansion, leasing, or renovation. However, respondents very definitely gave priority to family housing over the other facilities that are part of the living and working environment.

## POLICY PROPOSALS

Service members were asked to respond to 10 proposals that would affect housing policies. The first six dealt with the following assignment issues: (1) assignment to government housing based solely on bedroom requirements, (2) extension of eligibility to and construction of government family housing for those in the lowest pay grades who are now ineligible, (3) the same two extension and construction proposals, but with mention of realistic negative consequences of these proposals, and (4) no change in assignment procedures for government housing. The remaining four dealt with monetary allowances based on choices made by residents of government housing. Respondents rated each of the 10 proposals on a 5-point scale from strongly oppose to strongly favor with the midpoint (3.0) labelled undecided.

Policy Proposals Affecting Government Housing AssignmentOverall Responses by Service

Table K-46 shows the percentages of respondents in favor (somewhat favor and strongly favor combined), undecided, and opposed (strongly oppose and oppose combined) by enlisted/officer. The rank indicates the order by popularity in terms of the percentage favoring the proposals with enlisted and officer responses combined.

### Air Force Response Differences by Pay Grade Group, Housing Type, and Household Composition

Family housing was most often chosen by all pay grade groups in the Air Force as among the four most important areas for construction, expansion, leasing, or renovation (see Table K-44). For the E-4 to E-6 and E-7 to E-9 groups, medical facilities were a close second. The junior officers (O-1 to O-3) more frequently selected family housing among their four choices compared to the other pay grades. Enlisted personnel more frequently than officers selected improvements in medical facilities. Officers felt temporary lodging needed improvement more often than enlisted personnel. The E-1 to E-6 groups selected improvements in commissaries more frequently than all higher pay grades.

Table K-44

#### Improvements Needed by Pay Grade Group: Air Force

Problem	Responses (%)				
	E-1 to E-3 (n = 14)	E-4 to E-6 (n = 160)	E-7 to E-9 (n = 95)	O-1 to O-3 (n = 35)	O-4 to O-6 (n = 64)
Family housing (69.0)	57.1	68.8	63.2	85.7	71.9
Medical facilities (53.5)	57.1	63.8	56.8	34.3	32.8
Commissaries (32.2)	50.0	42.5	25.3	25.7	15.6
Temporary lodgings (31.8)	28.6	29.4	28.4	40.0	39.1
Exchanges (31.0)	28.6	32.5	29.5	34.3	28.1

In the Air Force sample, residents of economy housing were more likely than residents of government controlled (i.e., owned or leased) housing to select commissaries and medical facilities among the most important improvement areas. Residents of government-leased housing believed parking facilities needed improvement more than residents of government-owned and economy housing. Work areas were considered more important by those in government-owned housing than by those in the other housing types. As in the Army sample, the relationships found do not easily lend themselves to explanation with regard to housing. It is possible that type of housing is related to other variables that have more direct relationships to the selection of areas needing improvement.

By household composition, respondents with children more often than those without children selected youth facilities, child care, recreational facilities, and temporary lodging as needing improvement. Work areas were selected among the four most important areas for improvement to a greater extent by service members without children.

#### Choice of the "Most Important" Improvement Needed

Table K-45 shows the improvements selected most often as the single most important by Service. If the choice of the single most important improvement was made randomly or if there was no differentiation among the 14 areas listed, the average percentage of choice for each area would be approximately 7 percent.

Table K-43

## Improvements Needed by Pay Grade Group: Army

Improvement (% Overall)	Responses (%)					
	E-1 to E-3 (n = 15)	E-4 to E-6 (n = 116)	E-7 to E-9 (n = 160)	W-1 to W-4 (n = 82)	O-1 to O-3 (n = 99)	O-4 to O-6 (n = 229)
Family housing (72.2)	66.7	70.7	54.4	84.1	79.8	78.2
Commissaries (53.8)	66.7	64.7	60.0	53.7	43.4	47.6
Medical facilities (36.2)	60.0	49.1	45.6	36.6	30.3	23.6
Troop barracks, dorms (34.2)	26.7	26.7	40.0	26.8	36.4	36.2
Work areas (33.6)	20.0	32.8	26.3	43.1	36.4	38.9
Temporary lodging (29.2)	26.7	20.7	26.3	28.0	30.3	35.8

Religious facilities was selected as an area needing improvement by very few in both services (5% or less). In addition, dental facilities was selected well below the statistically expected average (about 28%) in both Services.

The major differences between the Services were:

1. More frequent selection of commissaries, troop barracks/dorms, and work areas by the Army sample.
2. More frequent selection of medical facilities, exchanges, and parking and child care facilities in the Air force.

None of the analyses up to now have included unaccompanied service members, who make up a large proportion of the samples in Korea. They are considered with special groups (p. 418).

#### Army Response Differences by Pay Grade Group, Housing Type, and Household Composition

Table K-43 shows the percent of each pay grade group selecting the improvements chosen by at least 28 percent of all the respondents. The percent next to each improvement area title is the percent of all those responding who selected it among their four most important areas.

Family housing was most frequently selected as needing construction, expansion, leasing, or renovation by all pay grade groups except the senior enlisted group (E-7 to E-9), who chose commissaries slightly more often. The enlisted groups showed more concern with improving commissaries and medical facilities than officers did. Commissioned officers (O-1 to O-6) were slightly more concerned than the E-4 to E-6 and W-1 to W-4 groups with improvements in troop barracks and more concerned than the E-4 to E-6 group with improvements in temporary lodging facilities.

Type of housing was related to selection of the majority of improvement areas in the Army sample. Residents of economy housing were more likely than residents of government-owned or government-leased housing to consider commissaries and medical facilities among the most important improvement areas. Those in economy and government-owned housing were more likely to choose improvements in commissaries. Family housing was more often selected by residents living off the installation (in government-leased and economy housing) than by service members in government-owned family housing. Residents of both types of government housing more often than those in economy housing selected temporary lodging as an area needing improvement.

By household composition, a higher proportion of service members with children selected youth facilities, recreational facilities, and child care facilities than did those without children. Individuals without children more frequently than those with children selected commissaries, medical facilities, and troop barracks/dorms as needing improvement.

## IMPROVEMENTS NEEDED

Respondents were asked to select, from a list of 14, the 4 most important areas in which they believed construction, expansion, leasing, or renovation was needed to improve living and working conditions at their current location. The list included some areas that were also listed under "problems" (e.g., child care, recreation, medical care, temporary lodging, family housing) and some new ones (e.g., exchanges, commissaries, troop barracks, parking facilities).

### Overall Choices of Improvements Needed

If respondents had chosen randomly from the list, an average of 28 percent selection (4 choices in 14) would be expected for each area. Therefore, 32 percent or more selecting an area and 24 percent or less represent statistically meaningful indications of choice and nonchoice.

Table K-42 shows the percentage of respondents in each Service who selected each of the 14 areas of needed improvement among their 4 choices.

Table K-42  
Choices of Improvements Needed (Q123-Q126)

Improvement Area	Army		Air Force	
	%	Rank	%	Rank
Family housing	72.2	1	69.0	1
Commissaries	53.8	2	32.1	3
Medical facilities	36.2	3	53.5	2
Troop barracks, dorms	34.2	4	22.8	9
Work areas	33.6	5	27.4	6
Temporary lodging facilities	29.2	6	31.8	4
Youth facilities	24.5	7.5	16.0	13
Family entertainment facilities	24.5	7.5	19.0	12
Recreation facilities	23.6	9	22.6	10
Exchanges	19.5	10	31.0	5
Parking facilities	15.4	11	26.4	7
Child care facilities	13.4	12	26.1	8
Dental facilities	12.4	13	19.6	11
Religious facilities	5.0	14	2.2	14

The overwhelmingly most frequent choice for needed improvement was family housing, selected by around 70 percent of both samples. Commissaries and medical facilities ranked either second or third in both Services. Work areas and temporary lodging facilities were also high in rank order in both services, with approximately 27 to 34 percent selecting these as areas where improvements are needed.



Type of housing was related to one-third of the problems in the Air Force sample. Residents of economy housing more frequently than those in government-owned or government-leased housing chose shipping and storage of household goods, shopping, permanent housing, transportation, and security. Residents of government-owned housing were more concerned than their counterparts with spouse employment.

By household composition, service members with children were more likely than those without children to report schools, temporary lodgings, permanent housing, and child care as problems. Those without children more often chose shopping and security among the three most serious problems.

#### Reporting of the Most Serious Problem (Q140)

Respondents were asked to select the first, second, and third "most serious" problems from a list of 21 potential problems with living overseas. Table K-41 presents the five problems most frequently selected by respondents in each service as most serious, together with the percentage of respondents who picked each one. Each of the 21 listed problems would be expected to average approximately 5 percent selection if choices were made randomly or if each individual had problems unique and different from everyone else.

Table K-41

#### "Most Serious" Problem for Each Service (Q140)

Problem	Responses (%)	
	Army	Air Force
Permanent housing	19.3	16.5
Language and cultural differences	9.6	--
Medical/dental care	8.1	9.3
Initial housing costs	7.8	8.3
Temporary lodging facilities	6.7	--
Transportation	--	7.8
Working conditions	--	7.2

Permanent housing was most frequently chosen as the most serious problem by a wide margin in both Services, and much more often than would be statistically expected by chance. Initial housing costs and medical/dental care were among the top five for the single most serious problem in both Services. Temporary lodging and language and cultural differences were the most frequently selected most serious problems in the Army sample. Transportation and working conditions appeared among the top five in the Air Force sample.

initial housing costs less frequently than the other groups. Other than these differences, there were few consistent differences that distinguished one pay grade group from the others.

Type of housing (government-owned, government-leased, economy) was related to a large majority of the 21 problems in the Army sample. Residents of economy housing more often than those in government-owned housing reported problems with: shipping and storage of household goods, shopping, and permanent housing and transportation (along with those in government-leased housing). Residents of government-owned housing reported language and cultural differences, temporary lodging, and spouse employment more often than residents of economy housing. Some of these differences are likely a function of variables associated with household composition rather than direct effects. Service members without children were more than twice as likely to live in economy housing. In addition, lower proportions of the junior enlisted personnel (E-1 to E-6) had children.

Service members with children were more likely to select schools and family adjustment as problem areas, while those without children were more likely to choose local telephone service, working conditions, and spouse employment as problems.

Air Force. Table K-40 shows the Air Force data. Senior officers were less likely than the other pay grade groups to consider medical/dental care, initial housing costs, and, along with junior officers, security as among their most serious problems. Officers were slightly more likely than the enlisted service members to consider temporary lodging a serious problem. The E-4 to E-6 group reported transportation as a serious problem more often than the higher ranks. No other strong differences appeared.

Table K-40  
Problems by Pay Grade Group: Air Force

Problem	Responses (%)				
	E-1 to E-3 (n = 16)	E-4 to E-6 (n = 163)	E-7 to E-9 (n = 94)	O-1 to O-3 (n = 35)	O-4 to O-6 (n = 60)
Permanent housing (32.6)	18.8	30.1	37.2	28.6	38.3
Medical/dental care (26.6)	25.0	30.1	28.7	25.7	15.0
Local telephone service (25.8)	37.5	23.9	27.7	25.7	25.0
Initial housing costs (20.4)	12.5	28.2	19.1	17.1	5.0
Security (18.5)	43.8	24.5	18.1	2.9	5.0
Transportation (18.2)	31.3	26.4	10.6	8.6	10.0
Spouse employment (16.6)	25.0	14.1	17.0	22.9	16.7
Temporary lodgings (14.1)	12.5	12.9	9.6	20.0	21.7

Over both Services, the only consistent strong difference by pay grade was the lower frequency of initial housing cost problems among the O-4 to O-6 group versus the other pay grades.

Table K-39

## Problems by Pay Grade Group: Army

Problem (% Overall)	Responses (%)					
	E-1 to E-3 (n = 15)	E-4 to E-6 (n = 113)	E-7 to E-9 (n = 147)	W-1 to W-4 (n = 81)	O-1 to O-3 (n = 94)	O-4 to O-6 (n = 204)
Permanent housing (35.9)	26.7	26.5	34.7	37.0	47.9	36.8
Language and cultural differences (21.4)	33.3	13.3	12.9	14.8	23.4	32.8
Initial housing costs (21.4)	13.3	23.9	33.3	27.2	26.6	6.9
Medical/dental care (21.4)	20.0	26.5	27.9	17.3	18.1	17.2
Transportation (20.8)	33.3	23.9	13.6	19.8	24.5	22.1
Shipping and storage of household goods (16.3)	26.7	7.1	10.9	22.2	19.1	20.6
Working conditions (16.2)	0.0	22.1	12.9	13.6	18.1	16.7
Local telephone service (16.2)	6.7	20.4	20.4	17.3	8.5	14.7
Spouse employment (15.9)	20.0	16.8	19.0	21.0	7.4	14.7
Temporary lodging (14.7)	6.7	7.1	12.9	13.6	14.9	21.1

Table K-38

Problem Areas Selected as One of the Three Most Serious (Q140-Q142)

Problem	Army		Air Force	
	%	Rank	%	Rank
Permanent housing	35.9	1	32.6	1
Language and cultural differences	21.4	3	12.2	11
Initial housing costs	21.4	3	20.4	4
Medical/dental care	21.4	3	26.6	2
Transportation	20.8	5	18.2	6
Shipping and storage of household goods	16.3	6	11.4	12
Working conditions	16.2	7.5	13.6	9
Local telephone service	16.2	7.5	25.8	3
Spouse employment	15.9	9	16.6	7
Temporary lodging facilities	14.7	10	14.1	8
Living expenses (including utilities)	13.1	11	10.6	13
Family adjustment to new situation	12.5	12	7.3	19
Recreation and entertainment	12.1	13	10.1	16
Shopping	11.5	14	9.8	17
Schools	9.9	15	9.5	18
Security	9.0	16	18.5	5
Vehicles (shipping, insurance, inspection)	7.6	17	10.3	14.5
Separation and related problems due to unaccompanied status	7.0	18	1.6	21
Utility services (other than costs)	6.4	19	10.3	14.5
Child care	4.4	20	13.0	10
Other	4.3	21	5.2	20

Table K-47  
Responses to Policy Proposals Affecting Allowances for Government Housing (Q133-Q136)

Proposal	Rank	Army (%)						Air Force (%)					
		In Favor			Undecided			In Favor			Undecided		
		Enl.	Off.	Enl.	Off.	Enl.	Off.	Enl.	Off.	Enl.	Off.	Enl.	Off.
Q133: Provide an annual utility allowance (based on family size, housing size, and location) allowing retention of any amount not spent on utilities and requiring out-of-pocket payment for any amount over the allowance.	3	51.9	44.6	13.7	14.8	34.5	40.6	3	52.6	45.2	19.0	16.3	28.5
Q134: Provide a reasonable allowance to occupants for doing selected minor repairs and maintenance on their units over and above what would normally be expected of them.	2	63.3	55.0	12.9	12.6	23.7	32.4	2	65.5	52.9	16.1	19.6	18.4
Q135: Allow service members to get housing with more bedrooms than they are qualified to have if they pay an additional amount of not more than 25 percent of their BAQ.	4	32.6	31.8	14.9	10.8	52.4	57.3	4	28.7	20.6	15.5	11.8	55.8
Q136: Allow service members to retain not more than 25 percent of their BAQ for living in housing units with fewer bedrooms than they are qualified to have.	1	64.2	71.0	13.0	7.9	22.8	21.2	1	70.3	68.6	15.8	7.8	13.9

Proposal 8 (Q134): Provide a Reasonable Allowance to Occupants for Doing Selected Minor Repairs and Maintenance on Their Units, Over and Above What Would Normally Be Expected of Them.

Army

This proposal ranked second (enlisted 63.3% in favor, officers 55.0% in favor). All pay grade group means were on the positive side of the response scale (3.1 to 3.4). No significant differences were found by pay grade group, current housing type, or household composition.

Air Force

As the second most popular of the choice-allowance proposals, the enlisted respondents were 65.5 percent in favor and the officers 52.9 percent in favor. All pay grade group means were positive (3.2 to 3.9) except for the O-4 to O-6s (3.0). No differences were found by housing type or household composition.

Proposal 9 (Q135): Allow Service Personnel to Get Housing With More Bedrooms Than They are Qualified to Have if They Pay an Additional Amount of Not More Than 25 Percent of Their BAQ.

Army

This was the least popular of the four choice-allowance proposals (enlisted: 32.6% in favor, 52.4% opposed; officers: 31.8% in favor, 57.3% opposed). All pay grade group means were negative (2.3 to 2.8). No significant differences were found by pay grade group, current housing type, or household composition.

Air Force

Least popular of the proposals, the enlisted respondents were 28.7 percent in favor and 55.8 percent opposed. Similarly, officers were 20.6 percent in favor and 67.6 percent opposed. All pay grade group means were negative (2.0 to 2.3). No significant differences were found by pay grade group, current housing type, or household composition.

Proposal 10 (Q136): Allow Service Members to Retain Not More Than 25 Percent of Their BAQ if They Live in Housing Units With Fewer Bedrooms Than They Are Qualified to Have.

Army

As the most popular of the four proposals, the enlisted respondents were 64.2 percent in favor and the officers 71.0 percent in favor. All pay grade group means were positive (3.3 to 3.8), except for the E-1 to E-3s (3.0). However, no significant pay grade group differences were found. Residents of government-owned housing were significantly more in favor of the proposal than those living in government-leased or economy housing. Respondents with children were more in favor than those without children.

### Air Force

As in the Army sample, this was the most popular of the four choice-allowance proposals (enlisted 70.3% in favor, officers 68.6% in favor). All pay grade group means were positive (3.2 to 3.7), except for the E-1 to E-3s (2.9). No significant differences were found by pay grade group, current housing type, or household composition.

## **SPECIAL GROUPS**

### Army

As shown in Table K-1, a large number of respondents in the Army sample fell into the special groups of service personnel with local national spouses and those who were unaccompanied. The number of respondents married to local nationals was larger than the number married to U.S. born or other foreign nationals. The unaccompanied respondent group in the Army sample was actually larger than the accompanied group.

The data that follow show that sample sizes vary widely as a function of the items used to define the special groups. Not all respondents answered all the items that were used for the definitions. As a result, the number comprising the total sample for each group also varies widely.

#### Accompanied Female Service Members

Only 1.6 percent of the sample fell into this special group (n = 12). This group was not large enough for analysis or to distinguish trends.

#### Accompanied Single Parents

Only two individuals (0.3%) were identified as accompanied single parents. No analysis was possible.

#### Comparisons by Spouse Nationalities

Spouses in the Army sample were 43.6 percent U.S. born (n = 322), 48.1 percent local nationals (n = 355), and 8.3 percent other foreign nationals (n = 61). The largest percentages of local national spouses were found in the E-4 to E-9 and O-4 to O-6 pay grades groups. Very few female service members were married to local nationals. Approximately 15 percent of the service members married to local nationals had married since arrival at the duty station compared to only 1.5 percent who had married U.S. born individuals and 8.3 percent who had married other foreign nationals since arriving.

Respondents married to local nationals were much more likely than the other groups to have relatives as dependents, along with spouses and children. They were also much more likely than the other groups to have nonsponsored dependents (36.4%) than those with U.S. born spouses (9.1%) or other foreign national spouses (18.0%). Reflecting the greater number of respondents who were recently married to local nationals, they reported fewer live-in dependents (2.4) than those with U.S. born (2.9) and other foreign national spouses (3.0). Host national spouses were reported as unemployed and not looking for work more often than the other spouses. U.S. born spouses were employed in civilian jobs more than the other groups.

Service members with local national spouses were more likely to live in the economy and in communities with few or no other Americans. The transportation arrangements of local national spouses showed they more often relied on friends or used public transportation (60.1%) than U.S. born spouses (36.3%) and other foreign national spouses (39.0%). In general, respondents with local national spouses reported greater usage of economy (versus government) facilities than the other groups.

Regarding the service members' preferences following completion of the current tour, those with local national spouses were more likely than others to prefer extensions or second tours in Korea. In contrast, respondents married to U.S. born spouses more often preferred to return to CONUS, and those with other foreign national spouses more often preferred a second overseas tour in another country.

Reporting of serious problems varied as a function of spouse nationality. Service members with local national spouses more often reported a problem with initial housing costs, while those with U.S. born spouses reported language and cultural differences, and those with other foreign national spouses reported family housing. Respondents with local national spouses were also more likely to select commissaries and medical facilities among the areas most needing improvement, compared to the other groups' selection of permanent housing.

Service members with U.S. born or other foreign national spouses were more likely to report they would not choose the present tour over again (37.9 and 42.0% respectively) than those married to local nationals (24.4%).

#### Respondents Accompanied by Nonsponsored Dependents

Nearly one-quarter (23.1%) of the sample reported having nonsponsored dependents living with them (n = 170). They were most often found in the E-1 to E-6 pay grade groups and least often found among the O-4 to O-6s. The reason for this may be the relatively large percentage (22.4%) who had married since arriving at the current duty station. Nonsponsorship was especially frequent among those married to local nationals. For those with nonsponsored dependents, the average number of live-in dependents was less (2.1) compared to respondents whose dependents were sponsored (2.9). A majority of nonsponsored spouses (61.1%) were reported to be unemployed and not looking for work.

Respondents with nonsponsored dependents were more likely to be negative or uncertain about making the military a career (16.8%) than those with sponsored dependents (4.3%). They were also much more likely to prefer to extend at the present location (29.2%) than those whose dependents were sponsored (9.6%).

Nearly all of the service members with nonsponsored dependents lived in economy housing. However, 60.2 percent preferred government housing. They were more likely to be sharing living expenses with others than with their dependents, and they more often lived in communities with few or no other Americans than those with sponsored dependents. Nonsponsored spouses were reported to use public transportation or to rely on friends for transportation much more often (82.7%) than sponsored spouses (38.2%). Overall dissatisfaction with the comfort and adequacy of the residence was higher among respondents with nonsponsored dependents (52.0%) than those with sponsored dependents (33.0%).

Service members with nonsponsored dependents more often than those with sponsored dependents reported negative effects of living conditions on their job performance (58.0%



versus 34.2% for the sponsored), on their career intentions (34.5% versus 22.2% for the sponsored), and on their willingness to choose the present assignment over again (42.6% versus 28.6% for the sponsored).

#### Respondents Preferring to Leave the Service (Excluding Those who had Already Served 20 Years or More)

Only 1.7 percent of the sample ( $n = 13$ ) indicated a preference for leaving the Service at the completion of the current tour. They were most often found among the E-1 to E-6 pay grade groups. Compared to respondents with preferences other than leaving the Service, they more often reported a negative effect of their living conditions on career intentions (57.5% versus 34.3% respectively) and were more likely than those not preferring to leave to report working conditions and transportation as serious problems.

#### Unaccompanied Respondents

Demographics. As mentioned earlier, the unaccompanied group was very large, comprising 54.8 percent of the sample ( $n = 898$ ). Compared to the accompanied, their pay grade distributions were about the same, except for underrepresentation in the 0-4 to 0-6 group. They were much less often married to local nationals (3.7%) than the accompanied respondents (48.3%). The very large majority were permanently unaccompanied (96.9%). All of the respondents who answered the item reported having been unaccompanied for six months or less.

Reasons for Being Unaccompanied (Q24-Q26). A large percentage of the unaccompanied respondents reported that they were very much or somewhat against having their dependents accompany them to the current duty station (40.8%). An additional 13.3 percent had mixed feelings about their dependents accompanying them and 45.7 percent were in favor of having their families with them. However, combining all three reasons given for being unaccompanied, the service members' responses to the previous question apparently did not always reflect their personal preferences. Only 7.5 percent reported being unaccompanied because they preferred to be. A majority (56.3%) reported reasons beyond their control (e.g., dependents not sponsored, service member work schedule, no concurrent travel unless housing available, and lack of suitable economy housing, among others). A sizeable percentage (31.2%) also reported their reasons as associated with their dependents (e.g., spouse job and dependents settling at the last duty station, among others). Very few (4.9%) declined to specify their reasons for being unaccompanied.

Impact of Being Unaccompanied on Job Performance (Q28). A high percentage (46.4%) of the respondents reported that their unaccompanied status had no effect on their job performance, while 39.1 percent reported they were less effective and 14.5 percent said they were more effective. The three best predictors of how the respondents rated the unaccompanied status effect, in order of their importance, were willingness to choose the present assignment over again, preference for being accompanied or unaccompanied, and the perceived effect of living conditions on job performance ( $R = .46$ ). Respondents who reported they would not choose the present assignment again, who preferred to be accompanied, and who reported a negative effect of living conditions on job performance were more likely to report being less effective in their job performance as a result of their unaccompanied status. Neutral or positive responses to these questions, then, would be associated with reports of no effects or positive effects of the unaccompanied status on job performance. The most important of these three responses, however, was the willingness to choose the present assignment again.

This analysis was based on a smaller number of respondents than in the total unaccompanied sample. Only those who answered all the items used in the analysis were included ( $n = 398$ ). Because of this and because the relationship is only moderate ( $R = .46$  out of a possible 1.00), no direct cause and effect relationships should be inferred.

Problems (Q140-Q142)/Improvements Needed (Q123-Q126). The most serious problem reported by the unaccompanied respondents was separation (and its related problems). Just over three-quarters (75.9%) included separation among the three most serious problems they encountered at their current duty station. The next most frequent selections were working conditions (34.1%), language and cultural differences (31.6%), and permanent housing (29.0%).

Relative to selection of the improvements needed to improve living conditions, the unaccompanied respondents chose troop barracks first (74.8%), among their three selections, followed by commissaries (55.8%), work areas (45.4%), recreational facilities (36.8%), exchanges (35.8%), and family housing (34.0%). These data imply that the unaccompanied respondents (most of whom were permanently unaccompanied) were responding to their own current situation much more than to the situation as they may have perceived it if they had been temporarily unaccompanied (that is, waiting for the arrival of their dependents).

Living Condition Impacts (Q137-Q139). The unaccompanied respondents were more likely than the accompanied respondents to report negative living condition impacts on their job performance (51.5% versus 39.6% of the accompanied), career intentions (38.2% versus 25.1% of the accompanied), and their willingness to choose the present assignment over again (59.0% versus 31.8% of the accompanied).

Most of the unaccompanied lived in barracks (86.6%). However, only 41.3 percent preferred that type of housing. The aspects of their housing with which a majority of respondents were dissatisfied or with which more of them were dissatisfied than satisfied, were: overall size, bedroom size, laundry facilities, availability/quality of government furniture, water purity, heating systems, maintenance and repair services, privacy, and convenience of the residence to major medical facilities. Overall, more of the unaccompanied were dissatisfied with the comfort and adequacy of their residences (48.6%) than were satisfied (34.5%). This overall dissatisfaction with the residence among the unaccompanied was higher than among the accompanied respondents (37.0%).

The single best predictor of the reporting of living condition impacts on job performance, career intentions, and willingness to choose the present assignment again was overall satisfaction with the current residence. In particular, the questionnaire items on which responses best combined to predict the perceived effect of living conditions on job performance were overall satisfaction with the residence, perceived effect of the unaccompanied status on job performance, and pay grade level ( $R = .56$  out of a possible 1.00). In effect, this means that respondents who were dissatisfied with their residence, who perceived that their unaccompanied status had a negative effect on their job performance, and who were in the lower pay grades (enlisted) were more likely to report a negative living condition effect on their job performance.

Similarly, the best predictors of the perceived living condition effect on career intentions and on willingness to choose the present assignment again were overall satisfaction with the residence and the perceived effect of the unaccompanied status on job performance ( $R = .45$  and  $R = .52$  respectively). The most important of these variables again was the degree of satisfaction with the current residence. Unaccompanied service

members who were dissatisfied with their residence and who perceived that their unaccompanied status had a negative impact on their job performance were more likely to report a negative living condition effect on both their career intentions and on their willingness to choose the present assignment again.

As mentioned earlier, the number of respondents who answered all items used in the above analyses was considerably smaller than the total number of unaccompanied respondents; so direct cause and effect relationships should not be assumed. It is clear, however, that satisfaction with the current residence does have some influence on perception of living condition effects.

Policy Proposals (Q127-Q136). Of the six policy proposals that would affect assignment to government family housing, a majority of the unaccompanied respondents favored three: assignment by bedroom requirement only (71.6% in favor), unconditional extension of eligibility to E-1 to E-3s and E-4s with dependents and less than 2 years of service (53.8% in favor), and construction of family housing specifically for those pay grades that are currently ineligible (51.4% in favor). The remaining three assignment proposals were opposed by a majority of the respondents. Construction of housing specifically for the lower pay grades, with the potential to delay all other housing construction, was opposed by 61.3 percent. Extension of eligibility for government family housing to the lower pay grades with the potential to increase waiting times for everyone was opposed by 58.5 percent of the unaccompanied respondents. However, the proposal suggesting that no change be made in current assignment policy was also opposed by the majority (51.1% opposed).

Three of the four policy proposals that offered choices regarding allowances to government housing occupants were supported by the unaccompanied respondents. Nearly two-thirds (64.3%) supported the maintenance allowance proposal and the proposal to allow retention of some BAQ for living in units with fewer bedrooms (63.6%). A majority (52.5%) were in favor of the utility allowance proposal. The proposal allowing payment of money beyond the BAQ for units with more bedrooms was opposed by the majority (56.6%).

#### Air Force

As in the Army sample in Korea, the largest special groups in the Air Force sample consisted of those married to local nationals, those with nonsponsored dependents, and those who were unaccompanied. The items used to define the special groups were not answered by all respondents. Therefore, the samples on which identification of each of the groups was based also varied widely.

##### Accompanied Female Service Members

Only one respondent (0.3%) in the Air Force sample met all the criteria for identification as an accompanied female service member.

##### Accompanied Single Parents

Only four respondents (1.0%) met all the criteria for identification as accompanied single parents.

### Comparisons by Spouse Nationalities

The Air Force sample included 22.2 percent with U.S. born spouses (n = 87), 72.2 percent with local national spouses (n = 283), and 5.6 percent married to other foreign nationals (n = 22). Service members with local national spouses were found principally in the E-4 to E-9 pay grade groups. Since a large percentage of these (30.1%) had married since arrival at the current duty station, they more often than those married to U.S. born or other foreign national spouses had no children. They also more frequently (42.3%) than the other groups had nonsponsored dependents. Local national spouses were more often reported as not employed and not looking for work (62.5%) than were U.S. born (44.4%) and other foreign national spouses (54.5%). Only 9.1 percent of the local national spouses were reported to be employed, compared to 32.1 percent of the U.S. born and 22.7 percent of the other foreign national spouses.

As in the Army sample, service members with local national spouses, more often than others, preferred to extend at the present location or to do a second tour in Korea. In contrast, respondents with U.S. born or other foreign national spouses largely preferred to return to CONUS after completion of the current tour.

Respondents with local national spouses somewhat more often than the other groups lived in and preferred to live in economy housing. Living in communities with few or no other Americans was more common among respondents with local (46.0%) or other foreign national spouses (46.2%) than among those with U.S. born spouses (16.7%). Dissatisfaction with the overall comfort and adequacy of the current permanent residence was higher among service members with U.S. born spouses (57.3%) and other foreign national spouses (57.1%), compared to those married to local nationals (41.5%).

Spouse dependence on the service member for transportation was highest among those married to other foreign nationals (20.0%), whereas reliance on friends or the use of public transportation was highest among local (72.1%) and other foreign national spouses (55.0%), compared to U.S. born spouses (36.6%). In general, respondents with local national spouses reported greater usage of economy (versus government) facilities than did the other two groups.

Service members in all comparison groups reported permanent housing as their most serious problem. Beyond that first choice, respondents with U.S. born spouses were more likely to report schools as a serious problem, while those with local national spouses more frequently reported initial housing costs and medical facilities. All groups most frequently selected family housing as needing improvement. Those with U.S. born spouses also selected medical and child care facilities. Those with local national spouses selected medical facilities and commissaries. Those with other foreign national spouses selected commissaries.

All comparison groups were approximately equal with respect to reporting negative living condition effects on job performance (36 to 43%) and on career intentions (20 to 27%). However, those with other foreign national spouses were more likely to say they would not choose the present assignment over again (50.0%) than were those with U.S. born spouses (37.9%) or those married to local nationals (24.9%).

### Respondents Accompanied by Nonsponsored Dependents

Air Force respondents with nonsponsored dependents comprised 35.5 percent of the sample (n = 139). They tended to be overrepresented in the E-4 to E-6 pay grade group

and underrepresented in the 0-4 to 0-6 pay grade group. A large percentage (37.7%) reported having gotten married since arrival at the current duty station, compared to 14.3 percent of those whose dependents were sponsored. This reflects the high number of respondents with nonsponsored dependents whose spouses were local nationals (86.1%). Nonsponsored spouses were more frequently reported to be unemployed and not looking for work (65.6%) than were sponsored spouses (53.7%).

Respondents with sponsored dependents were more likely to have already served 20 years or more in the Service (26.1%) compared to those whose dependents were not sponsored (10.1%). Almost all the service members with nonsponsored dependents lived in economy housing (92.2%); however, only 42.6 percent preferred that type of housing. Less than half of the respondents with sponsored dependents lived in economy housing (40.0%), with even fewer preferring that type (27.4%). Service members with nonsponsored dependents more often reported dependent transportation problems (58.1%) than those with sponsored dependents (40.1%). Sponsored spouses more often provided their own transportation (38.4%) than nonsponsored spouses (4.0%).

Respondents with nonsponsored dependents were consistently more negative with respect to perceived living condition effects. They more frequently reported negative effects on job performance (52.9 versus 37.3% of those with sponsored dependents), on career intentions (29.0% versus 16.7% of those with sponsored dependents), and on willingness to choose the present assignment over again (35.5% versus 25.8% of those with sponsored dependents).

#### Respondents Preferring to Leave the Service (Excluding Those who had Already Service 20 Years or More)

Only 1.7 percent of the sample (n = 7) fell into this special group.

#### Unaccompanied Respondents

Demographics. Close to one-half of the Air Force sample (45.0%) were unaccompanied (n = 325). No differences were found in pay grade distributions of the unaccompanied, compared to the accompanied. Approximately 15 percent of the unaccompanied were separated, divorced, or widowed. Of those currently married, the very large majority of the unaccompanied were married to U.S. born spouses (84.6%), compared to the 71.9 percent of the accompanied who were married to host nationals. Nearly all of the respondents (99.4%) were permanently unaccompanied.

Reasons for Being Unaccompanied (Q24-Q26). Approximately equal percentages of the unaccompanied respondents reported that they did not want (43.1%) or that they did want (42.8%) their dependents to accompany them, with 14.1 percent reporting mixed feelings. However, examination of the reasons given for the unaccompanied status revealed that more was involved than personal preference. The majority (54.0%) reported reasons beyond their control (e.g., dependents not command sponsored, lack of suitable economy housing, the high cost of relocation, no concurrent travel permitted without housing available, among others). The second most frequently given reasons (32.6%) revolved around the dependent situations (e.g., spouse job, perceived deficiency with DoD schools, and poor timing for dependents to move, among other). Being unaccompanied because of personal preference was reported by only 9.2 percent; 4.1 percent failed to specify a reason.

Impact of Being Unaccompanied on Job Performance (Q28). A high percentage of respondents reported no impact on their job performance as a result of their unaccompanied status (47.5%), while 35.7 percent reported they were less effective and 16.8 percent reported they were more effective. The three best predictors of the perceived impact of the unaccompanied status were, in order of importance, preference for being accompanied or unaccompanied, willingness to choose the present assignment over again, and the perceived effect of living conditions on job performance ( $R = .58$ ). Respondents who preferred to be accompanied, those who were not likely to choose the present assignment again, and those who reported negative living condition effects on their job performance were more likely to report that their unaccompanied status negatively impacted their job performance. Neutral or positive responses to these variables would then be associated with reporting of no effects or positive effects of the unaccompanied status.

The number of service members who answered all of the items used in these analysis (above) was smaller ( $n = 177$ ) than the total unaccompanied group. Direct cause and effect relationships should not be assumed. However, there is evidence to support the belief that preference for being accompanied does influence the perception of negative impacts of the unaccompanied status on job performance.

Problems (Q140-Q142)/Improvements (Q123-Q126). Respondents were asked to select from a list of 21, the 3 most serious problems they had encountered living in the present foreign location. Combining these three choices, separation was the most frequently chosen problem overall (64.1%). After that, 33.8 percent chose working conditions, 26.5 percent chose language and cultural differences, and 25.2 percent chose permanent housing.

In terms of the areas needing improvement at the current post, base, or duty station, combining their 4 choices from a list of 14, the most frequent choice was overwhelmingly troop barracks (79.1%). Subsequent choices were work areas (50.7%), medical facilities (41.6%), commissaries (38.3%), family housing (37.7%), and recreation facilities (35.7%). As in the Army unaccompanied group, it appears that the respondents (most of whom were permanently unaccompanied) were responding to their immediate needs as unaccompanied individuals.

Living Condition Impacts (Q137-Q139). Unaccompanied service members were more likely than accompanied respondents to report negative living condition impacts. They more often reported negative effects of living conditions on job performance (50.3% versus 42.9% of the accompanied), on career intentions (30.6% versus 21.0% of the accompanied), and on willingness to choose the present assignment over again (51.3% versus 29.2% of the accompanied).

Over three-quarters of the unaccompanied lived in barracks (77.4%); however, only 37.5 percent preferred to live in barracks. Slightly more dissatisfaction with the current permanent residence was found among the unaccompanied respondents (53.0%) than among the accompanied service members (47.6%). The aspects of their residences with which a majority were dissatisfied or with which more were dissatisfied than satisfied were overall size, bedroom size, laundry facilities, availability/quality of government furniture, electrical service adequacy, water purity, heating systems, privacy, external appearance of the residence, and convenience of the residence to major medical facilities.

The single best predictor of perceived effects of living conditions on job performance, career intentions, and willingness to choose the present assignment over again was service member overall satisfaction with the adequacy and comfort of the residence. In

particular, service member overall satisfaction with the residence, combined with the perceived effect of the unaccompanied status on job performance and with pay grade level, moderately predicted the response to perceived living condition effect on job performance ( $R = .53$ ). Respondents who were dissatisfied with their residence, perceived a negative effect on their job performance as a result of being unaccompanied, and those in lower enlisted pay grades tended to report negative living condition impacts on their job performance. Middle or positive responses to these variables then would be associated with reports of no effect or positive living-condition effects.

Similarly, the two best predictors of perceived living condition effects on career intentions and on willingness to choose the present assignment again also were degree of satisfaction with the residence and perceived impact of the unaccompanied status on job performance ( $R = .42$  and  $R = .47$  respectively). The reader is cautioned again that the previous three analyses represent the opinions of only part of the unaccompanied group, the respondents who answered all questions used in the analyses. Although direct cause and effect relationships should not be assumed, it is clear that degree of satisfaction with the residence influenced the perceived effect of living conditions on job performance, career intentions, and willingness to choose the present assignment over again.

Policy Proposals Q127-Q136. Of the six policy proposals that would affect assignment to government family housing, a majority of the unaccompanied respondents supported the unconditional extension of eligibility for family housing to the lower enlisted pay grades (64.5% in favor), the construction of housing specifically for the lower enlisted pay grades with dependents (56.2% in favor), and the assignment of government family housing solely on the basis of bedroom requirements (55.8% in favor). The remaining three proposals were opposed by the majority. The proposal to make no change to the existing assignment policy was opposed by 59.7 percent. The policy to construct housing for the lower enlisted pay grade families, delaying construction of all other housing, was also opposed (56.1%). Finally, the proposal to extend eligibility to lower graded enlisted families, potentially causing waiting times for government housing to be increased for all, was opposed by 52.4 percent.

Three of the four proposals that dealt with allowances and choices of government family housing occupants were favored by the unaccompanied respondents. Over two-thirds (67.4%) favored the proposal allowing choice of living in units with fewer bedrooms in exchange for retention of some of the BAQ. Nearly two-thirds of the respondents (64.9%) favored the maintenance allowance proposal, and 52.1 percent favored the utility allowance proposal. The remaining proposal allowing payment of additional money over the BAQ for units with more bedrooms was opposed by 55.4 percent of the unaccompanied respondents.

## PERCEIVED EFFECTS OF LIVING CONDITIONS

One of the long range purposes of this and similar studies is to assess the effects of living conditions on military readiness and retention. The survey did not directly measure readiness or retention. However, to obtain information related to these topics, the questionnaire asked the respondents to evaluate the effects of living conditions on this tour (defined as housing, support facilities, costs, transportation, etc.) on their job performance and military career intentions. Respondents were also asked if they would choose their present assignment again, knowing the living conditions. Job performance may be considered as one component of readiness and career intention as an indicator of potential retention.

Table K-48 presents service members' perceptions of the effects of living conditions. Very and somewhat negative response categories were combined as negative, and very and somewhat positive were combined as positive. With regard to the question on choosing one's present assignment again, definitely and probably not were combined as no, while definitely and probably yes were combined as yes.

The majority in both Services reported that living conditions had an effect on their job performance (64.0% in the Army sample and 56.5% in the Air Force sample). The majority of individuals who perceived an effect reported it as negative. For all respondents, 40 to 43 percent perceived a negative effect. In contrast, the majority of the samples in both Services did not perceive that living conditions affected their military career intentions (59% in the Army and 71% in the Air Force reported no effect). The majority of those that did report an effect on career intentions it was negative.

For all respondents, 21 to 25 percent reported a negative effect of living conditions, with 8 to 15 percent reporting a positive effect. A majority (60% in the Army and 62% in the Air Force) reported that, considering the living conditions, they would choose their present assignment over again. This indicates that living conditions did not have a severe negative influence on the majority, as measured by their willingness to do the tour again.

#### Differences by Pay Grade Group, Housing Type, and Household Composition

##### Army

Pay grade group was statistically related to each of the items assessing the effects of living conditions. Senior officers (O4 to O6), on the average, showed more positive responses to all three questions. The largest differences were between the O-4 to O-6 group and the E-4 to E-6 group with respect to job performance and career intentions, and the E-1 to E-3 group (despite the small respondent size) with respect to choosing the present assignment over again. Senior officers evaluated the effects of their living conditions more positively than lower-grade enlisted personnel.

Housing type showed a strong relationship to the three living condition effects items. Residents of government-owned housing had a more positive average rating of the effects of living conditions than residents of government-leased and economy housing on all three items. Average ratings of the effects of living conditions on job performance and military career intention were on the positive side of the scale for those in government-owned housing, whereas they were on the negative side for the residents of the other two housing types.

Having children living with them or not had no statistical relationship to responses on the effects of living conditions for any of the three items.

##### Air Force

Pay grade group was not definitely or reliably related to perceived effects of living conditions for any of the three items.

Type of housing showed statistical effects similar to that in the Army sample for the items on effects of living conditions on job performance and military career intention. Residents of government-owned housing were somewhat more likely to report positive effects than service members in other housing types. There was no statistical effect on willingness to choose the present assignment again.



Table K-48

## Responses to Living Condition Effects Questions (Q137-Q139)

Question	Army (%)		Air Force %		Total	
	Enlisted	Officer	Enlisted	Officer	Enlisted	Officer
Q137: Which best describes the effect that living conditions on this tour have had on your job performance?	(n = 305)	(n = 434)	(n = 290)	(n = 105)	(n = 595)	(n = 539)
Negative	41.0	39.4	42.4	43.8	41.7	40.3
No effect	39.0	33.9	47.2	33.3	43.0	33.8
Positive	20.0	26.7	10.3	22.9	15.3	26.0
Q138: Which best describes the effect that living conditions on this tour have had on your military career intentions?	(n = 304)	(n = 433)	(n = 290)	(n = 105)	(n = 594)	(n = 538)
Negative	30.9	21.2	20.7	21.9	25.9	21.4
No effect	54.3	62.8	72.8	66.7	63.3	63.6
Positive	14.8	15.9	6.6	11.4	10.8	15.1
Q139: Relative to living conditions, if you had a choice and you had it to do over, would you choose your present assignment?	(n = 303)	(n = 434)	(n = 290)	(n = 105)	(n = 593)	(n = 539)
No	33.0	31.1	29.0	30.5	31.0	31.0
Unsure	10.2	7.1	10.3	4.8	10.3	6.7
Yes	56.8	61.8	60.7	64.8	58.7	62.3

Whether respondents did or did not have children living with them was not related to any of the perceived effects of living conditions.

These data provide further evidence of the effects of type of housing. It also emphasizes the differences between the lower enlisted groups and the higher ranks in attitudes, opinions, and effects of their current living conditions.

### Explaining the Perceived Living Condition Effects

Looking for clues to the perception of the effects of living conditions, a group of variables that were believed to represent factors that deal with these conditions directly or indirectly were selected for inclusion in multiple regression analyses. They included demographic characteristics, time factors, perceived effects of and satisfaction with temporary housing, satisfaction with the housing office, characteristics of the residence, spouse and dependent transportation, and overall satisfaction with the current residence.

Aggregated across both Services, service member overall satisfaction with adequacy and comfort of the permanent residence was most strongly related to the perceived effects of living conditions on job performance and on military career intentions. The higher the satisfaction, the more likely the individual was to report positive effects of living conditions.

Overall satisfaction with the residence and effects of temporary housing experiences on attitude toward living in a foreign location had the strongest relationships to perceived effects of living conditions on willingness to choose the present assignment again. The relationships were positive--the higher the satisfaction, the more likely to choose the assignment again.

The strength of these relationships between the variables and the perceived effects of living conditions were low but statistically reliable, as indicated by correlation coefficients ranging from .41 to .52.

## **DISCUSSION**

The discussion will focus, except where noted, on accompanied service members in the Army and Air Force in Korea.

The samples consisted largely of officers (warrant and commissioned) in the Army and of enlisted personnel in the E-4 to E-6 and E-7 to E-9 groups in the Air Force. Compared to the proportions of the various pay grades in the entire population, the E-1 to E-3 group was underrepresented in both services and the senior officers were overrepresented, especially in the Army sample. Of the total number of respondents, over 50 percent were unaccompanied in the Army and slightly under 50 percent in the Air Force. The respondents were highly career motivated with over 70 percent expressing an intention to probably or definitely remain in the service for at least 20 years with another 18 to 20 percent who had already served 20 years or more. Less than 2 percent of the respondents were female. A very large percentage of the service members had local national spouses--48 percent of the Army sample and 72 percent of the Air Force sample. The large majority of the accompanied sample had dependent children living with them. A substantial minority of these individuals had dependents living with them who were not command sponsored. The under- and overrepresentation of certain pay grade groups may have biased some of the results presented for the total respondent sample.

the enlisted groups (15 to 22%). Groups showing the highest percentages without sponsors were E-1 to E-3s (22% overall), Marine Corps personnel (29% overall), and service members in Korea (24% overall).

Nearly half of those who had sponsors (47%) reported the sponsor's attitude toward living conditions as positive, while 32 percent said it was negative. The highest percentages of sponsors who were reported to be negative were found in Korea (39%) and the United Kingdom (37%). The lowest percentage was found in Japan/Okinawa (25%). The lower grade enlisted respondents (E-1 to E-3 and E-4 to E-6) were more likely to report their sponsors as negative (41 and 38% respectively) than all other pay grade groups (24 to 32%).

Among respondents with sponsors, 63 percent reported their sponsor as somewhat or very helpful in family adjustment. Only 18 percent reported that their sponsor was not helpful. The remainder (19%) reported that their sponsor was unavailable or that they did not need help. The four Services showed very similar percentages of personnel who rated their sponsor as helpful (62 to 65%). Service members in Korea rated their sponsors as helpful 51 percent of the time compared to those in the other four countries where 61 to 67 percent of those with sponsors rated them helpful with family adjustment. The lower pay grade groups were somewhat less likely to see their sponsor as helpful (52% for the E-1 to E-3 group and 54% for the E-4 to E-6 group) than all other pay grade groups. Commissioned officers were most likely to report that their sponsors were helpful (68% for the O-1 to O-3 group and 75% for the O-4 to O-6 group).

Overall, the sponsor program appears to work better among the officer pay grades, in terms of both assignment of sponsors and accomplishing the purpose of the program.

## **PERMANENT HOUSING, FACILITIES, AND SERVICES**

### **Housing Type and Preference**

There were variations by country (and to some extent by Service within country) in the percentages of respondents living in government-owned, government-leased, and economy housing. The majority of the respondents lived in government-owned housing in Germany (54%) and Japan/Okinawa (71%). About half (48%) of the respondents in the United Kingdom and Air Force respondents in Germany (51%) lived in economy housing. The majority of Air Force personnel (58%) in Korea also lived in economy housing. Very large majorities (89 and 77%) of the Air Force and Navy service members in Italy lived in economy housing. Substantial minorities lived in economy housing in the Army in Korea (31%), Marine Corps in Japan/Okinawa (40%), and in the Air Force in the United Kingdom (47%). Only in Korea among Army personnel did a substantial percentage (38%) live in government-leased housing. The extreme variations by country and Service can be seen in the following differences between high and low percentages living in each major housing type:

1. Government-owned--less than 1 percent in the Navy and Air Force in Italy to 80 percent in the Air Force in Japan/Okinawa.
2. Government-leased--less than 2 percent of each Service in Japan/Okinawa to 38 percent in the Army in Korea.

Transportation to inspect economy rentals was most frequently reported as not provided across countries and Services (from 30% in Germany to 59% in Korea). In Korea, 39 to 59 percent of the respondents reported nonprovision of each of the six services. Orientation to the local housing market, lease review and/or rental negotiation, and overall assistance finding economy housing were services most often reported as provided. Service members in Italy and Germany least often reported nonprovision of most of the six services measured.

Nonuse of the six services listed was most often reported in Japan/Okinawa and Korea (17 to 31%). Services most often not used were help with utility companies (10% in Italy to 38% in Germany) and language interpretation in dealing with landlords (13% in Italy to 34% in the United Kingdom). Combining the percentages who reported nonprovision and nonuse of housing office services, the majority (64 to 80%) of the respondents in Korea did not receive help from the housing offices. Language interpretation, transportation to inspect rentals and help with utility companies were also reported as not provided or not used by a majority (73 to 87%) of Navy respondents in the United Kingdom.

#### Satisfaction with Wait for Government Housing and the Referral and Assignment Services of the Housing Offices

Forty percent or more of the respondents in nearly all country/Service groups expressed dissatisfaction with the length of waiting time for government housing. The exception to this was the Navy sample in Italy (33.5%). These levels of dissatisfaction suggest that shortages exist in government family housing relative to the demand.

Dissatisfaction with referral services (services that deal with finding housing in the economy) ranged from 44 to 64 percent. Dissatisfaction with assignment services of the housing offices was less than for referral services and less than for the wait for government housing. Nevertheless, between 35 and 55 percent of the respondents reported they were somewhat or very dissatisfied. This may have been related to the dissatisfaction with length of wait for government housing.

#### Temporary Lodging Experiences

Respondents were asked if their experiences in temporary lodgings had affected their choice of permanent housing or their attitude toward living overseas. Results showed that, regardless of the Service or country, respondents perceived that the temporary lodging experiences affected their choice of permanent housing (approximately 50% perceived an effect) more than their attitude toward living in a foreign location (about 30% perceived an effect). Approximately one-third (31%) of the respondents reported making a less than satisfactory choice of permanent housing because of their temporary lodging experiences. Approximately 22 percent said their attitude toward living overseas had "worsened" as a result of their temporary housing experiences.

#### Sponsor Program

Two questions were asked concerning the service members' evaluation of their sponsor: one on the attitude of the sponsor toward living conditions at the assignment location and the other on the helpfulness of the sponsor in family adjustment. Approximately 13 percent reported that no sponsor was provided. Lack of sponsors was highest in

Table 4

Housing Office Services Not Provided or Not Used by Respondents Living in Economy Housing by Country and Service

Housing Office Service	Responses (%) <sup>a</sup>											
	United Kingdom			Germany			Italy			Japan/Okinawa		
	Not Provided	Used	Not Used	Not Provided	Used	Not Used	Not Provided	Used	Not Used	Not Provided	Used	Not Used
<u>Orientation to Local Housing Market</u>												
Army	--	--	--	20.4	12.8	8.2	26.3	12.7	--	46.3	22.0	--
Navy	17.3	11.1	--	--	--	12.7	17.1	14.9	--	--	--	--
Air Force	11.7	13.7	--	16.9	12.5	7.5	14.1	11.2	--	44.2	32.3	--
Marine Corps	--	--	--	--	--	--	--	29.5	--	--	--	--
<u>Transportation to Inspect Economy Housing Listings</u>												
Army	--	--	--	30.9	20.2	10.8	26.9	10.8	--	55.6	19.6	--
Navy	63.9	10.8	--	--	--	18.1	19.8	17.3	--	--	--	--
Air Force	50.8	25.1	--	29.4	21.1	10.4	61.6	63.7	--	62.2	22.1	--
Marine Corps	--	--	--	--	--	--	--	53.6	--	--	--	--
<u>Language Interpretation in Dealing with the Landlord</u>												
Army	--	--	--	5.8	26.2	10.6	11.3	10.6	--	44.3	28.3	--
Navy	51.7	29.0	--	--	--	15.9	4.2	15.9	--	--	--	--
Air Force	47.6	36.6	--	7.6	28.6	12.0	12.3	39.2	--	44.2	34.1	--
Marine Corps	--	--	--	--	--	--	--	32.1	--	--	--	--
<u>Lease Review and/or Rental Negotiation</u>												
Army	--	--	--	2.9	12.1	5.8	10.0	5.8	--	41.8	23.5	--
Navy	18.4	21.6	--	--	--	11.9	2.8	13.1	--	--	--	--
Air Force	8.5	22.8	--	2.5	10.1	5.1	3.8	17.7	--	36.4	26.7	--
Marine Corps	--	--	--	--	--	--	--	34.1	--	--	--	--
<u>Overall Assistance in Finding Economy Housing</u>												
Army	--	--	--	4.3	12.8	7.0	10.5	7.0	--	40.2	20.1	--
Navy	8.1	11.9	--	--	--	12.8	4.3	11.3	--	--	--	--
Air Force	4.9	14.3	--	3.7	10.2	7.8	11.0	9.2	--	42.4	30.9	--
Marine Corps	--	--	--	--	--	--	--	30.0	--	--	--	--
<u>Assistance With Utility Companies</u>												
Army	--	--	--	17.4	34.5	9.8	21.0	9.8	--	51.6	29.8	--
Navy	43.2	29.7	--	--	--	7.5	4.7	19.3	--	--	--	--
Air Force	26.3	29.1	--	21.5	39.5	14.1	21.3	31.0	--	42.9	24.4	--
Marine Corps	--	--	--	--	--	--	--	28.2	--	--	--	--

<sup>a</sup>The highest response percentages of those over 40 percent are underlined.

## OBTAINING HOUSING

### Housing Office Listings of Economy Housing

Service members were asked to rate their satisfaction with five aspects of housing office listings of economy rentals: number, up-to-date information, size of units, rental costs, and distance to the installation. The percentage expressing dissatisfaction varied somewhat by country, Service, and the specific aspect of the listings. Dissatisfaction was greatest with the number of listings provided by the housing offices (52 to 80%). Dissatisfaction with up-to-date information about economy rental listings ranged from 40 to 64 percent, with a majority dissatisfied in Korea in the Air Force. With the exception of the respondents in Italy, the size of the available economy rentals was not satisfactory to over 40 percent in Germany and to a majority (56 to 65%) of the respondents of the United Kingdom, Japan/Okinawa, and Korea. Dissatisfaction with rental costs was highest in the United Kingdom (52%) and Korea (69%) and lowest in the Air Force in Germany and in all Services in Italy (under 40% dissatisfied). By comparison, the least amount of dissatisfaction was expressed across countries and Services with the commuting distances of rentals to the installations. Only in the Air Force in the United Kingdom did a majority express dissatisfaction with commuting distances.

Problems concerning economy listings may not be a function of the housing office deficiencies, however, but a reflection of the market for economy rental housing.

### Housing Office Services

Respondents were asked about the helpfulness of the housing office in providing services to those seeking housing in the economy. The possible responses also included nonprovision and nonuse of the services. For most country/Service groups who rated the helpfulness of the housing offices services,<sup>12</sup> a majority reported the following as somewhat or very helpful: orientation to the local housing market (70%), language interpretation with landlords (81%), lease revision and/or rental negotiation (83%), and overall assistance in finding economy housing (62%). Less helpfulness was reported across countries and Services with transportation to inspect economy rentals (64%) and dealings with utility companies.

Perhaps of equal importance as ratings of helpfulness were the percentages of respondents who reported that the housing office services were not provided or not used. Table 4<sup>13</sup> shows, by country and Service, the percentages of service members who said the various services were not provided or that they did not use them. The highest percentages (40% or more) reporting are underlined.

Nonuse and nonprovision of services by the housing offices cannot be explained by the survey data. Nonuse may be a result of service member perception of housing office deficiency or of a lack of need for the service. The high frequency of reports of nonprovision could be a result of poor communication of what is available at housing offices.

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<sup>12</sup> Respondents who said the service was not provided or used are not included.

<sup>13</sup> Tables 1 through 3 are in the "Introduction."

## OVERALL DISCUSSION AND CONCLUSIONS

### INTRODUCTION

This section discusses the similarities and contrasts among the service members in the five countries surveyed as well as between Services within countries. This discussion does not cover all the survey's aspects, but rather highlights the commonalities and differences among Services and countries with regard to living conditions. The reader should refer to the appropriate section of this report for detailed information on any particular content area by country and to all the survey responses<sup>11</sup> for a breakdown of responses on all questionnaire items. Except where noted, this discussion focuses on those service members who were accompanied.

Appendix A provides the questionnaire. In Appendix B, the written comments of the respondents are summarized by topic area. These comments aid in explaining service member dissatisfaction with aspects of housing, facilities, and services, and they highlight the issues and problems that were most salient to service members at the time of the survey. In Appendix C, comparisons are made of the responses in the current study and those made by respondents in the 1982 DoD Family Housing Preference Survey (Lawson, et al., 1983). These comparisons are limited to questionnaire items that were highly similar in both studies. These comparisons may help the reader with interpretation of the results by putting the attitudes and opinions of the respondents in the current study into a context.

### SAMPLE

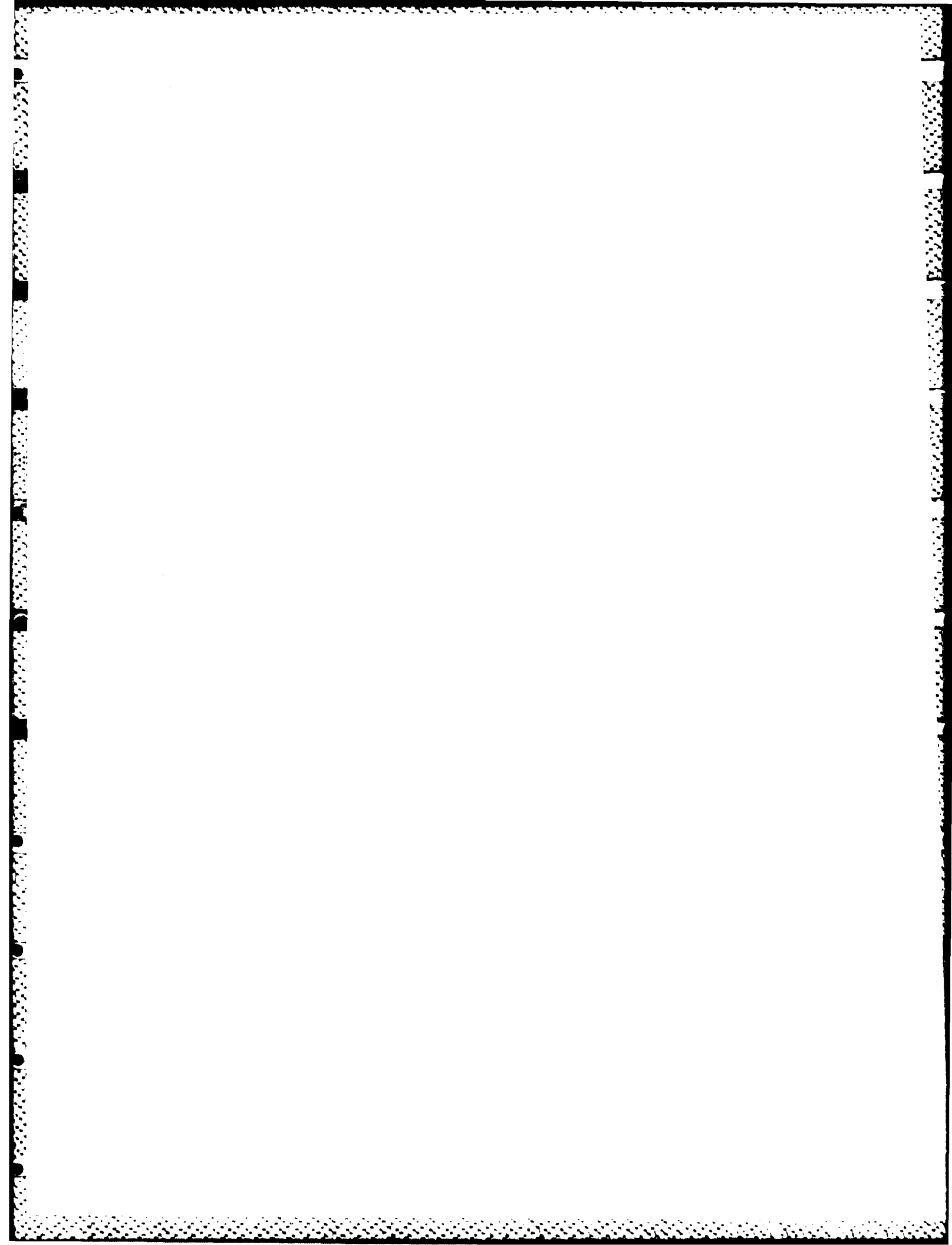
The sample used for this discussion included 17,364 service members, ranging from E-1 to O-6. There were 12 country/Service groups. The following sample sizes were used in the analysis for each country/Service group:

<u>ARMY</u>		<u>Air Force</u>	
GERMANY	2770	United Kingdom	1996
ITALY	710	Germany	1681
KOREA	1784	Italy	418
TOTAL	5264	Japan/Okinawa	1878
		Korea	790
		Total	6763
<u>Navy</u>		<u>Marine Corps</u>	
United Kingdom	830	Japan/Okinawa	1884
Italy	785	Total	1884
Japan/Okinawa	1838		
Total	3453		

In general, return rates were higher for officers than for enlisted personnel with especially low return rates for the junior enlisted pay grade groups (E-1 to E-3) in all Services. Because the lower pay grade groups were underrepresented, the overall results may have been somewhat biased in favor of the opinions of higher grade service members.

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<sup>11</sup>See NPRDC Tech. Rep. 85-29, Department of Defense Survey of Living Conditions Overseas 1984. Vol. 3: Responses.





4. Residents of government-owned housing were more satisfied than those living in economy housing with 30 of the 31 specific aspects of housing, facilities, and services measured in both Services. Satisfaction with these aspects was higher among Army than Air Force respondents. Over all Services and housing types, greatest dissatisfaction was found with residence and room sizes, heating systems, water purity, and convenience of the residence to major medical facilities. Overall dissatisfaction was higher among respondents living in government-leased and economy housing (40 to 48%) than among those living in government-owned housing (16 to 27%). Size of the residence was the most important determinant of overall satisfaction.

5. Service members showed high levels of dissatisfaction with the adequacy and comfort of their temporary lodgings (42 to 58% across all types). Specific aspects causing the greatest dissatisfaction were size of the quarters, lack of play space for children, and kitchen, cooking, eating, and laundry facilities.

6. Of six housing office services listed (orientation to the local housing market, transportation to inspect rental, language interpretation dealing with landlords, lease review, help with utility companies, and overall assistance finding economy housing), the majority of respondents in both Services (60 to 85%) reported the services as either not provided or not used.

7. Service members who believed that living conditions influenced their job performance and military career intentions generally saw these effects as negative. Overall satisfaction with the permanent residence was the major influence on the perceived effects of living conditions.

8. Both being unaccompanied and having nonsponsored dependents living with the service members were associated with more negative perceptions of the effects of living conditions on job performance and military career intentions, as well as with unwillingness to choose the present assignment again.

9. Most popular of six policy proposals affecting government housing assignment were extension of eligibility to those service families currently ineligible, assignment by bedroom requirement, and construction of family housing specifically for those currently ineligible. Allowing service members to retain some of their BAQ in exchange for living in units with fewer bedrooms and providing a maintenance/repair allowance was the most popular among four choice-allowance proposals.

willingness to choose their present assignment again. The most frequently selected problem area was separation and related problems due to being unaccompanied. Some of the write-in comments expressed very strong family and emotional problems due to separation and an unwillingness to go through the experience again as illustrated by the following comment from an Air Force E-3:

This tour has created one of the worst hardships in my life. In 9 months here in Korea, I've lost my wife (due to being unaccompanied), was unable to see my newborn son, and have gotten into financial problems due to sending dependent support and supporting myself. I hope never to experience anything like this again as long as I live! (Air Force E-3)

This has implications for retention of those sent on unaccompanied tours. Less than good living conditions in barracks, where the large majority of unaccompanied personnel live, contribute to the negative effects of living conditions. As would be expected, overall satisfaction with the comfort and adequacy of the residence was much lower among the unaccompanied than the accompanied respondents.

Of most relevance to the mission of the military, a limited amount of data was obtained concerning perceived effects of living condition on job performance, military career intentions, and willingness to choose the present assignment again. The majority of respondents (64% in the Army and 56.5% in the Air Force) reported that living conditions had an effect on their job performance, with a large majority of these individuals reporting a negative effect. A much smaller percentage saw living conditions as having an effect on their career intentions (41% in the Army and 29% in the Air Force). Of those who reported an effect, the majority reported the effect to be negative. However, a majority in each Service (60 and 62%) said they would choose their present assignment over again, knowing the living conditions.

These data, although indirect, provide some evidence that living conditions may influence military performance and retention. In Korea, living conditions, which to a large extent involve satisfaction with one's residence, have more of a negative than a positive effect.

## CONCLUSIONS

1. In both Services, serious problems were reported with permanent housing, initial housing costs, medical/dental care, and transportation. Army respondents also reported problems with language and cultural differences. Air Force respondents reported local telephone service and security as problems.

2. There was a perceived need for improvement in permanent housing, temporary housing, medical facilities, commissaries, and work areas in both Services. Army respondents also selected troop barracks, and Air Force respondents selected exchanges as areas needing improvement.

3. The type of current housing varied by Service. In the Army sample, 24.9 percent were living in government-owned housing, 37.9 percent in government-leased housing, and 37.2 percent in economy housing. In the Air Force sample, only 11.5 percent lived in government-owned housing, 20.4 percent in government-leased housing, and 68.1 percent in economy housing. Government-owned housing was preferred by a majority of respondents in both Services (73.9% Army, 54.9% Air Force).

Based on the data on reactions to policy proposals, service members are ready for changes (making the ineligible eligible for government family housing or constructing family housing for those now ineligible) unless the changes negatively affect them. Policies that might put more money into one's pockets as a function of one's own choices also were generally favored.

Service members married to local national spouses in both Services generally do not differ from those with American or other foreign national spouses with respect to attitudes, opinions, and perceptions. They were more likely to prefer extensions or another tour in Korea. Those with local national spouses also were more likely to say they would choose their present assignment again than were service members with American or other foreign national spouses.

Nonsponsorship of dependents living with the service member showed several negative effects in both Services. Compared to those whose dependents were sponsored, service members with nonsponsored dependents were more likely to see negative effects of their living conditions on their job performance, military career intentions, and willingness to choose their present assignment again. Having dependents with them who are not command sponsored imposes hardships not borne by others which have strong effects on the perceptions of their living conditions and its effects. Of direct relevance, almost all those with nonsponsored dependents lived in economy housing and showed much less satisfaction with the adequacy and comfort of their residences than those whose dependents were command sponsored. The relationship between satisfaction with the residence and perceived effects of living conditions were mentioned previously.

The following comment from an Air Force enlistee expresses one aspect of the frustration felt by respondents with nonsponsored families:

One of the worst problem areas concerning this tour is the fact that my dependent wife cannot utilize the BX or commissary. Why should she be cut off from the facilities just because I wanted her with me and paid her way to be with me. Someone ought to think again about the policies and see about changing them to benefit those who want and need to be together. (Air Force E-4)

In contrast to the problems of respondents with nonsponsored dependents were many additional comments from those who did not/could not take their families with them. This comment from an Army officer was typical of those received:

USAG Yongsan and Osan AB and other military compounds in Korea are living it up compared to the disgraceful living conditions faced by soldiers assigned to any 2nd Infantry Division compound. There are NO command-sponsored positions in 2ID due to our mission, and, consequently, our troops live like dogs. When this survey is completed, come to Korea and see for yourself. (Army O-3)

Unaccompanied service members, most of whom were unaccompanied not by choice but by circumstances, also showed some strong effects of their status. Approximately 35 to 40 percent reported that being unaccompanied negatively affected their job performance. They were also more likely than their accompanied counterparts to see living conditions as negatively affecting their job performance, military career intentions, and

transportation was mentioned as very costly, slow, and inconvenient. Those selecting transportation as one of their major problems had longer commuting times to their installation than those not selecting this as a serious problem.

The category of language and cultural differences was frequently chosen as a problem in the Army sample, especially among the commissioned officers (few of whom were married to Korean nationals). In the Air Force sample, local telephone service and security were frequently selected. The former was a high choice item among all pay grade groups, while security was much more highly selected as a serious problem by enlisted service members.

Areas not cited as problems in both Services, with less than 11 percent selecting them as among the three most serious problems encountered, were schools, vehicles, separation due to unaccompanied status, and utility services (other than costs). Differences between the Army and Air Force on serious problems, satisfaction with residence, and other factors may reflect different geographic locations as well as differences in housing, facilities, and services available.

Facility improvements (facilities needing construction, expansion, leasing, or renovation to improve living conditions) frequently selected in addition to family housing and medical facilities were commissaries (especially in the Army), temporary lodging facilities, exchanges (Air Force), troop barracks (Army), and work areas. The Army accompanied sample, who did not live in barracks themselves, selected troop barracks as one of the most important areas needing improvement. This indicates that at least some respondents chose areas of improvement on the basis of what others or the installation needed and not only on the basis of personal needs.

Service members in the Air Force sample were, in the majority, favorable to policy changes in assignment of government family housing. They were in favor of extending eligibility to service members with dependents regardless of pay grade, of assigning family housing solely on the basis of bedroom requirements, and of constructing family housing for the E-1 to E-3 and E-4 (with less than 2 years of service) groups. In the Army sample, close to equal percentages were in favor and opposed to the eligibility extension and construction proposals. However, about two-thirds were in favor of assignment of family housing solely on the basis of bedroom requirements while maintaining separate officer and enlisted housing. Both Services were substantially more opposed than in favor of a policy of no change in assignment of government family housing.

When the proposals to extend eligibility regardless of pay grade and to construct government family housing included negative consequences (increased time on waiting list for everyone else and delayed construction of all other government family housing), about two-thirds were opposed. With the mention of negative consequences, ratings of approval decreased for all pay grade groups, including the E-1 to E-3s. The latter nevertheless remained more favorable to the proposals with negative consequences for others than did all other pay grade groups.

A majority in both Services were favorable to proposals that would provide allowances for performing maintenance and repair on their units and for retaining part of their BAQ for living in units with fewer bedrooms than they were qualified to have. The majority were opposed to a proposal that would allow paying extra for living in housing with more bedrooms than the family was qualified for. A proposal for a utility allowance that would allow the service member to keep what was not spent and pay out-of-pocket for using an amount over the allowance was favored by more than were opposed, especially in the Air Force.

remain in place. Since my wife has a native understanding of Korean, she was able to tell me what was actually going on when we applied for quarters. The absolute only reasons I have adequate quarters (and got them quickly) was that I can operate within the threat and bribe system here as well as the locals. (Army O-4)

In contrast to the situation described above, another Army officer (without a Korean spouse) wrote this:

A native or at least fluent English speaking contact personnel at housing would have reduced my frustration tremendously. I was most frustrated by not knowing my status/potential wait for housing. I received a housing assignment only after an IG complaint. (Army O-5)

There was also a high level of dissatisfaction with listings of economy rentals provided by the housing offices in both services. Only the commuting distances of the available rentals to the installation showed a relatively high level of satisfaction. Among the write-in comments, an Army O-4 said, "In Korea a listing of adequate (CONUS type) housing is not available at the housing referral office which is run by Koreans. If you want to get good service, you must pay for it."

To emphasize the housing problem(s) further, permanent housing was most frequently selected among the three most serious problems in both Services and was picked most frequently as the single most serious problem. Family housing was selected by a large majority in both Services as among the four most important facilities needing construction, expansion, leasing, or renovation to improve living conditions, and it was most frequently selected as the most important. Individuals who selected permanent housing as one of their three most serious problems were more dissatisfied with the overall comfort and adequacy of their residence and more dissatisfied with many of the specific items dealing with their house, facilities, and services related to their residence than were those not selecting this problem. Housing shortages may also be part of the problem and the need expressed for construction, etc. of family housing. Service members who selected permanent housing as one of their most serious problems and family housing as one of the four most important areas for needed improvement were more likely to be dissatisfied with their wait for government housing than those not selecting this problems and this area for needed improvement.

Among the other frequently selected problems in both Services were initial housing costs, medical/dental care, and transportation. Medical facilities were also among the most frequently selected areas for needed improvement, especially in the Air Force sample. Comments about medical care mentioned the need for a pediatrician at one facility, substandard treatment, long waiting times, small physical facilities, lack of fire and safety standards in the hospital, and the following from an Air Force officer.

Medical facilities during my tour have been extremely poor and the quality cannot even be called sub-standard. My wife was denied care during her pregnancy and never saw a doctor until she developed a severe infection following birth at a local civilian hospital. (Air Force O-3).

Comments about transportation problems revolved around limitations on privately owned vehicles (POV) and the rules against having a POV for E-5s and below. Public

was the most powerful predictor in the Air Force sample. Dissatisfaction does not seem to be based on the number of rooms in the residence. Respondents were not high on dissatisfaction with the number of bedrooms and bathrooms. In fact, there was relatively high satisfaction in the Army sample with these two aspects. Thus, satisfaction with size appears to be a function of the size of the rooms and the size of the residence overall.

Overall satisfaction with the adequacy and comfort of one's residence is the most statistically influential predictor of service members' perceptions of the effects of their living conditions on their job performance, military career intentions, and willingness to choose the present assignment over again. The more satisfied with their residence, the more likely they were to report positive effects of living conditions on the three outcomes. Effects of experience in temporary lodging on attitude toward living in foreign countries and transportation factors (commute time to installation, miles to installation, dependent transportation problems) also had small statistical effects on perceived effects of living conditions on one or two of the outcomes (job performance, military career intentions, willingness to choose present assignment again). Although not a direct indication, these results demonstrate that various aspects of the individual's living conditions, especially overall satisfaction with one's permanent residence, may have effects on one aspect of military readiness (job performance) and on retention (career intention).

Analysis of the individual satisfaction items (including overall satisfaction) showed that satisfaction is multidimensional. From the items analyzed, five somewhat independent components of satisfaction emerged, including: (1) satisfaction with structural factors, especially size; (2) satisfaction with operating systems and furnishings; (3) satisfaction with facilities and services for children; (4) satisfaction with convenience of residence to the installation, services, and facilities; and (5) the immediate physical-psychological surroundings of the residence (i.e., appearance, privacy, security, and neighborhood appearance).

Overall satisfaction was part of the structural (size) and the immediate physical-psychological surroundings dimensions. If satisfaction with housing and related services is a goal for the military, the relationships between overall satisfaction and the various dimensions of satisfaction have implications for planning and developing housing and communities for American military personnel.

Housing offices have the responsibilities, among others, of aiding personnel in obtaining economy housing and maintaining lists of and assigning individuals to government housing. Service members in both Services who were living in economy housing did not, for the most part, use these services. For some of the housing office services, over 80 percent reported that the service was not provided or that they did not use the service. In the Army sample, those using the services rated them helpful more frequently than not helpful. For most of these services, almost equal percentages of those few respondents in the Air Force sample who responded rated them helpful and not helpful.

Insights into the lack of use and reporting of nonprovision of services came from the write-in comments. Korean nationals run the housing offices and several individuals talked about bribes that must be paid to get adequate housing. Several mentioned poor management of these offices and limited command of English by some of the Korean employees. One Army officer described the situation this way:

The operation is, has been, and will continue to be bad joke as long as the current, long term Korean nationals (working for us) continue to

The following comment from an Army enlistee partially illustrates why satisfaction was lower among economy housing residents than those living in government-owned/controlled housing:

Here in Korea the Korean houses are poorly put together and very cold in winter months. The landlords always want too much money and give you a hard time when you want to get something fixed. I am married to a Korean and they give her a hard time because she is married to a G.I. (Army E-8)

Looking at the responses to specific items by all pay grades combined, a higher degree of dissatisfaction was expressed with more aspects of housing in the Air Force sample than in the Army sample. Water purity, heating, and convenience to major medical facilities showed high dissatisfaction in both Services. The availability and quality of government furniture and recreational facilities for preteen and teenaged children also showed relatively high levels of dissatisfaction for those to whom these factors were applicable, in both Services.

In the Air Force, high levels of dissatisfaction were also reported for size of residence, living/dining room, and bedroom; hot water; electrical service; laundry facilities; number of kitchen appliances furnished; availability of child care; convenience of residence to playgrounds; and transportation time for children bused to school. Service members in the Air Force showed more dissatisfaction than those in the Army with their residence and with more of the specific aspects of the residence and facilities and services in relation to the residence. Both the percentage expressing dissatisfaction and the number of items for which dissatisfaction was expressed were greater in the Air Force. The data do not provide insights into why these differences occurred except that a higher proportion of Air Force respondents than Army respondents lived in economy housing.

Across both Services, the highest percentages of individuals were satisfied with the number of bathrooms, convenience of the residence to installation and government facilities, and accessibility of public transportation.

Pay grade group was related to satisfaction ratings of most of the 31 specific housing aspects measured for both the Army and Air Force samples. Officers, especially senior officers, were more satisfied than the E-4 to E-6 group. (The E-1 to E-3 group was too small to show statistically reliable differences from the other pay grade groups.) For a large number of aspects of the residence, facilities, and services, the senior enlisted group (E-7 to E-9) was also more satisfied than the E-4 to E-6 group in both Services. However, the E-4 to E-6 groups were not statistically different from the other pay grade groups, to a reliable degree, in their ratings of overall satisfaction with the adequacy and comfort of their residence. In the Air Force sample, the senior officers were less satisfied (although not to a statistically reliable degree) than the other pay grade groups. This apparent anomaly may be explained in part for the Air Force sample by the fact that the senior officer group was more dissatisfied with the size of their residence than was the E-4 to E-6 group to a statistically reliable degree. Satisfaction with residence size is one of the variables that was strongly related to overall satisfaction with the comfort and adequacy of their residence for both the Air Force and the Army samples.

Overall satisfaction with one's residence is largely a function of satisfaction with size. In the Army sample, satisfaction with residence size was the most powerful statistical predictor of overall satisfaction, while satisfaction with living/dining room size

Almost all the respondents were living in permanent housing at the time of the survey. In the Army sample, approximately equal percentages (37%, 38%) lived in government-leased and economy (plus other type) housing, with the remainder in government-owned housing. In the Air Force, the majority lived in economy housing with relatively small percentages living in government-owned and government-leased quarters. The majority preferred living in government-owned housing in both Services, with a substantially higher preference in the Army. In the Air Force sample, close to one-third preferred economy housing, while only 15 percent in the Army expressed a preference for that type of housing. Officers in both Services preferred government-owned housing more than enlisted groups, while the latter showed a higher percentage preferring economy housing.

A majority of respondents in the Army (56%) and over 40 percent in the Air Force were dissatisfied with the length of wait for government housing. This suggests shortages. Several write-in comments addressed the shortage of housing and the need for more housing. Unaccompanied tours and unsponsored dependents are also partly a function of lack of government housing. This comment from an Army officer was typical:

Yongsan South Post housing is excellent, but only for O-5 and above. The housing elsewhere is not very good and detrimental to morale and attitude toward serving in Korea. Anything that could be done to construct more family housing at Yongsan, U.S. built and maintained, would be a big step in the right direction. Management of command sponsored tours is a "must" as well, so that waiting times for housing are not excessive. (Army O-6)

Overall satisfaction with the comfort and adequacy of one's residence was reported by nearly 50 percent in the Army sample, while about 37 percent expressed dissatisfaction. In the Air Force, the percentages were reversed--slightly less than 50 percent reported dissatisfaction and about 37 percent reported satisfaction. Senior officers in the Army sample expressed the highest percentage of satisfaction (almost 60%) and the junior officers lowest (34%). (Because of the very small numbers, the E-1 to E-3 group is not discussed.) In the Air Force, the satisfaction data were the opposite of those in the Army. The senior officers were most dissatisfied (58.5%). The enlisted groups showed a somewhat higher percentage dissatisfied than satisfied, while the O-1 to O-3 group showed equal percentages satisfied and dissatisfied.

In both Services, residents of government-owned housing were substantially more satisfied with the adequacy and comfort of their residence than residents of government-leased and economy (and other) housing in both Services. Service members were also more satisfied with government-owned temporary housing than the other two housing types, but the levels of satisfaction were lower than for permanent residences. In addition, greater satisfaction was reported by government-owned housing residents for almost all of the 31 specific aspects of satisfaction measured in the Army sample and the large majority of these aspects in the Air Force sample. Residents of government-leased housing were generally more satisfied with many housing aspects than those in economy housing, but showed less satisfaction on some items than those in government-owned housing. More of these differences appeared in the Army than in the Air Force samples. Most of the differences, in both Services, between residents of government-owned and economy housing were very strong, with the former showing medium to high levels of satisfaction; and the latter, medium to high levels of dissatisfaction. Differences were pervasive and included all factors of satisfaction in the Army and most of them (especially size, operating systems, furnishings, security, and costs) in the Air Force.



3. Economy--from 17 percent of the Air Force in Japan/Okinawa to 89 percent of the Air Force in Italy.

Across all five countries the majority (57%) preferred government-owned housing, with most of the rest (33%) preferring economy housing. Over 80 percent of those currently living in government-owned housing preferred that type. Close to 50 percent of residents of government-leased housing and one-third of residents in economy housing also preferred government-owned housing. In general, in the Asian countries there was greater preference for government-owned housing among service members in government-leased or economy housing than there was in the European countries.

Possible explanations for preference differences with respect to housing type were found in responses to other items on the questionnaire. The size of the housing unit and the immediate physical-psychological surroundings of the residence (e.g., appearance, privacy, and security) were the components of overall satisfaction found to be most closely associated with service member and spouse overall satisfaction with the residence. In the Asian countries and in the United Kingdom, economy housing is generally considerably smaller than housing by American standards. In Germany and Italy, the size of economy housing is more often closer to American standards. Therefore, the preference for government-owned housing in Japan/Okinawa and Korea (especially) may be linked to the size of the economy units available. In Germany, the greater preference for economy housing may be associated with the greater reported dissatisfaction with appearance and privacy among respondents living in government-owned stairwell apartments.

Additionally, transportation considerations and language and cultural differences may affect housing preferences. In Italy, Japan/Okinawa, and Korea, preference for government-leased housing was especially low. Respondents living in these units reported them to be located farther away from the duty station and government support facilities than either government-owned or economy housing. In Italy, some spouses and/or dependents may be hesitant to drive these longer distances to support facilities because of the potential for being a crime victim should their vehicles break down. This fear is exacerbated by the lack of local telephone service from which to call for help. Restrictions on the shipping of privately owned vehicles to Japan/Okinawa may leave some service families with only one car, making the proximity of government-owned housing to support facilities more attractive. In Japan/Okinawa and Korea, the extreme differences in language and culture may also contribute to service families feeling less comfortable about driving long distances.

Housing preferences of respondents in foreign locations were found to be somewhat different than those of respondents in the continental United States (CONUS). For a comparison of housing preferences between respondents in the current study and those in the 1982 CONUS study (Lawson et al., 1983), see Appendix C.

#### Overall Satisfaction with Adequacy and Comfort of Permanent Housing

Table 5 shows the percentages of respondents who reported that they were somewhat or very dissatisfied with the overall comfort and adequacy of their permanent residences, by type of housing. The groups showing 30 percent or more dissatisfied are underlined. In addition, the total percent dissatisfied for each country, Service, and housing type are shown in Table 5.

Table 5  
Dissatisfaction with Overall Comfort and Adequacy of  
the Permanent Residence by Housing Type, Country, and Service

Country/ Service	Responses (%) <sup>a</sup>			Total <sup>b</sup>
	Government- owned	Housing Type Government- leased	Economy	
<u>United Kingdom</u>				29.2
Navy	-- <sup>c</sup>	<u>39.4</u>	25.0	<u>32.3</u>
Air Force	28.6	<u>30.7</u>	26.6	27.2
<u>Germany</u>				29.2
Army	<u>38.3</u>	24.9	16.1	<u>31.6</u>
Air Force	<u>36.2</u>	<u>32.9</u>	16.1	25.6
<u>Italy</u>				29.6
Army	<u>30.7</u>	<u>45.2</u>	29.4	<u>33.4</u>
Navy	-- <sup>c</sup>	28.9	29.1	<u>29.2</u>
Air Force	-- <sup>c</sup>	-- <sup>c</sup>	21.6	24.0
<u>Japan/Okinawa</u>				24.2
Navy	19.8	-- <sup>c</sup>	29.8	22.5
Air Force	17.5	-- <sup>c</sup>	<u>41.1</u>	23.8
Marine Corps	19.7	-- <sup>c</sup>	29.0	27.7
<u>Korea</u>				<u>40.6</u>
Army	15.2	<u>40.3</u>	<u>50.0</u>	<u>37.1</u>
Air Force	-- <sup>c</sup>	-- <sup>c</sup>	<u>48.3</u>	<u>47.1</u>
Total	26.7	<u>34.3</u>	28.6	28.7

<sup>a</sup>Response percentages over 30 percent are underlined.

<sup>b</sup>Total includes respondents who reported living in types of housing not included in this figure (i.e., "other" housing, which may include local country housing and/or individually purchased residences).

<sup>c</sup>Less than 100 living in this type of housing responded to the question on overall residence satisfaction.

Service members in Korea expressed the greatest dissatisfaction (nearly 41%) with temporary housing while those in Japan/Okinawa showed the lowest dissatisfaction (24%). Respondents in the other three countries showed very similar percentages (approximately 29%) reporting dissatisfaction.

In terms of overall satisfaction with one's permanent residence, there was differential satisfaction with the type of housing as a function of the country (e.g., more dissatisfaction with economy housing in Japan/Okinawa and more dissatisfaction with government-owned housing in Germany). Occupants of government-leased housing were the most dissatisfied (34%). Occupants of government-owned housing were slightly less dissatisfied (26%) than those living in economy housing (29%).

In all countries, with the exception of Japan/Okinawa, 30 to 40 percent of the occupants of government-leased housing in at least one Service expressed dissatisfaction with their residence. Government-owned housing showed relatively high levels of dissatisfaction (30 to 40%) in Germany (both Army and Air Force) and in the Army in Italy. Economy housing showed the highest percentage of dissatisfaction in the two Asian countries (29% in Japan/Okinawa and 49% in Korea).

When the housing types were combined, the majority did not express dissatisfaction with their residence in any country or Service. Sixty percent or more expressed satisfaction in the following groups:

1. Government-owned housing--Army and Air Force in Korea and Navy, Air Force, and Marine Corps in Japan/Okinawa (Marine Corps sample size less than 50).
2. Government-leased housing--Army in Germany.
3. Economy housing--Navy and Air Force in the United Kingdom, Army and Air Force in Germany, and Air Force in Italy.

Only one difference across all countries was found to be statistically reliable in average ratings of satisfaction. Overall satisfaction with one's residence was slightly higher among junior officers (O-1 to O-3) than most of the other pay grade groups. The other groups were not statistically different from each other.

#### Satisfaction with Specific Aspects of Permanent Residence, Facilities, and Services

Table 6 shows the data on satisfaction with specific aspects of the permanent residence, facilities, and support services. Only those aspects with which at least 40 percent or more of the respondents in one or more country/Service groups were dissatisfied are listed. All percentages of 40 percent or more are underlined.

There was high dissatisfaction (40% or more) with aspects of the permanent housing, facilities, and services among Air Force respondents in Korea and Navy respondents in Italy. Many items also were reported as causing dissatisfaction (40% or more) for Navy personnel in the United Kingdom and for both Army and Air Force personnel in Italy. In contrast, respondents in Germany and Japan/Okinawa were the least dissatisfied with aspects of their housing, facilities, and services.

The two aspects causing the greatest amount of dissatisfaction across countries and Services were the inadequacy of heating systems (46%) and the inconvenience of the residences to major medical facilities (47%). Other aspects showing 40 percent or more

Table 6

Percentage Dissatisfied with Specific Aspects of the Permanent Residence, Facilities, and Services by Country and Service<sup>a</sup>

Aspect	Responses (%) <sup>b</sup>											
	United Kingdom			Germany			Italy			Japan/Okinawa		
	Navy	Air Force	Army	Navy	Air Force	Army	Navy	Air Force	Army	Navy	Air Force	Marine Corps
Adequacy of heating system (including insulation)	60.4	49.6	27.8	30.8	30.8	61.2	72.1	76.3	46.2	39.4	59.6	52.7
Convenience of residence to major medical facilities	57.7	48.8	51.8	47.8	47.8	50.3	71.5	64.0	34.4	26.9	38.7	51.3
Bedroom size(s)	46.2	51.7	45.6	37.8	37.8	40.5	21.6	28.8	41.6	40.8	44.4	40.0
Number/availability of recreational facilities for preteen children	46.3 <sup>c</sup>	42.1 <sup>c</sup>	40.9 <sup>c</sup>	36.4 <sup>c</sup>	36.4 <sup>c</sup>	49.8 <sup>c</sup>	55.7 <sup>c</sup>	55.8 <sup>c</sup>	27.1 <sup>c</sup>	28.2 <sup>c</sup>	36.8 <sup>c</sup>	42.6 <sup>c</sup>
Living/dining room size	42.3	41.7	32.2	30.9	30.9	36.9	17.3	35.2	40.0	38.0	40.6	44.6
Availability and quality of government furniture	18.7 <sup>c</sup>	22.6 <sup>c</sup>	36.4	35.3 <sup>c</sup>	35.3 <sup>c</sup>	45.1 <sup>c</sup>	25.7 <sup>c</sup>	53.8 <sup>c</sup>	25.4 <sup>c</sup>	48.0	44.4 <sup>c</sup>	42.3 <sup>c</sup>
Maintenance and repair services	41.9	35.4	27.8	26.5	26.5	40.7	51.7	40.2	18.9	21.0	28.5	42.3
Number/availability of recreational facilities for teenage children	45.6 <sup>c</sup>	40.0 <sup>c</sup>	34.8 <sup>c</sup>	34.0 <sup>c</sup>	34.0 <sup>c</sup>	42.1 <sup>c</sup>	49.6 <sup>c</sup>	48.4 <sup>c</sup>	24.6 <sup>c</sup>	25.8 <sup>c</sup>	31.5 <sup>c</sup>	36.2 <sup>c</sup>
Convenience of residence to youth activity centers	43.6 <sup>c</sup>	38.2 <sup>c</sup>	33.3 <sup>c</sup>	29.4 <sup>c</sup>	29.4 <sup>c</sup>	50.2 <sup>c</sup>	61.0 <sup>c</sup>	54.6 <sup>c</sup>	22.5 <sup>c</sup>	28.6 <sup>c</sup>	33.5 <sup>c</sup>	29.4 <sup>c</sup>
Adequacy of laundry facilities	49.1	37.9	33.1	38.0	38.0	36.8	57.3 <sup>c</sup>	48.1 <sup>c</sup>	31.9	16.9	31.3	30.5
Purity of water	20.2	29.4	38.6	20.0	20.0	45.8	40.0	39.7	14.9	23.3	25.4	52.2
Convenience of residence to playgrounds	30.3 <sup>c</sup>	35.3 <sup>c</sup>	21.3	23.3 <sup>c</sup>	23.3 <sup>c</sup>	45.2 <sup>c</sup>	60.8 <sup>c</sup>	54.9 <sup>c</sup>	19.0 <sup>c</sup>	30.5 <sup>c</sup>	34.2 <sup>c</sup>	32.8 <sup>c</sup>
Hot water supply	33.4	31.0	20.6	27.3	27.3	46.1	53.8	39.7	18.7	16.0	21.9	40.4
Residence size	42.2	43.7	39.0	35.1	35.1	36.0	18.4	27.1	36.3	34.6	37.5	43.7

<sup>a</sup>Percentages based on all respondents to these questions including those who responded, "Does not apply."

<sup>b</sup>Response percentages over 40 percent are underscored.

<sup>c</sup>Ten percent or more of the respondents responded, "Does not apply."

Table 6 (Continued)

Aspect	Responses (%) <sup>b</sup>														
	United Kingdom			Germany			Italy			Japan/Okinawa			Korea		
	Navy	Air Force		Army	Air Force		Army	Navy	Force Force		Navy	Air Force	Marine Corps	Army	Force
Number of kitchen appliances furnished	28.7	28.0		28.8	26.5		31.0	43.4 <sup>c</sup>	45.4 <sup>c</sup>		20.3	20.8	29.1	34.5	46.4
Cost of utilities	49.7 <sup>c</sup>	34.4 <sup>c</sup>		11.8 <sup>c</sup>	21.6 <sup>c</sup>		32.0 <sup>c</sup>	48.8 <sup>c</sup>	47.6		17.1 <sup>c</sup>	13.5 <sup>c</sup>	24.2 <sup>c</sup>	20.1	30.4 <sup>c</sup>
Adequacy of electrical service	24.0	23.1		25.9	21.0		39.0	68.5	39.2		14.9	13.7	20.4	38.5	51.6
Personal safety and security	18.8	13.3		23.5	15.3		28.6	50.1	21.5		10.4	10.4	11.6	36.7	44.0
Convenience of residence to base facilities (commissary and exchange)	42.6	35.1		22.9	22.0		34.8	56.1	34.4		14.9	12.6	16.8	35.0	30.2
Operating condition of kitchen appliances	32.7	31.1		30.0	25.2		30.2	34.6	28.0		17.9	17.0	22.6	37.3	40.8 <sup>c</sup>
Degree of privacy	24.6	25.4		42.8	39.4		34.2	28.7	24.8		25.8	28.6	22.5	30.7	39.3
Appearance of neighborhood	21.2	19.2		31.4	24.0		27.0	38.4	14.6		19.0	22.8	23.4	38.0	40.9
Convenience of residence to medical dispensary/clinic	43.5	34.1		28.2	28.0		33.3	37.7	36.3		18.1	16.9	27.0	38.5	27.6
Convenience of residence to duty station	33.3	32.0		19.9	20.8		34.5	50.0	30.1		18.3	14.2	18.3	30.9	24.7
Availability of child care services and facilities	32.7	32.2 <sup>c</sup>		32.1 <sup>c</sup>	23.8 <sup>c</sup>		34.1 <sup>c</sup>	38.0 <sup>c</sup>	29.4 <sup>c</sup>		16.6 <sup>c</sup>	15.1 <sup>c</sup>	22.0 <sup>c</sup>	26.6 <sup>c</sup>	43.9 <sup>c</sup>
Accessibility of public transportation	21.4	27.4		14.5	21.5		28.4	41.8	35.9		14.0	16.5	12.2	15.8	16.9

<sup>a</sup>Percentages based on all respondents to these questions including those who responded, "Does not apply."

<sup>b</sup>Response percentages over 40 percent are underscored.

<sup>c</sup>Ten percent or more of the respondents responded, "Does not apply."

dissatisfaction in at least 6 of the 12 country/Service groups were bedroom sizes, living/dining room size, availability and quality of government furniture, maintenance and repair services, and number/availability of recreational facilities for preteen children. Aspects for which none of the groups showed dissatisfaction levels above 40 percent included number of bedrooms and bathrooms, cost of housing, and the external appearance of the residences.

Several aspects (identified by a footnote on Table 6) were reported as not applicable by 10 percent or more of the respondents, chiefly those without children on the items related to facilities for children and those living in government housing on items concerning costs. Individuals who said that the item was not applicable to them were included in the total for this discussion. Thus, if only the respondents for whom the item applied were included, much higher levels of dissatisfaction would have been reported. In particular, recreational facilities for children and housing and utility costs were sources of dissatisfaction primarily for those with children and those living in economy housing.

The reader is referred to the findings for individual country and to Appendix C for a summary of the write-in comments for further explanations of why dissatisfaction was especially high with certain aspects of housing, facilities, and services.

#### Government-furnished and Loaner Furniture

Several questions were asked concerning the use and preference for government versus one's own furniture, as well as an evaluation of loaner furniture used by service members while waiting for the arrival of their own. Slightly over one-half (53%) of the respondents were using all of their own furniture with another one-quarter (25%) using mostly their own furniture. Less than one quarter (23%) were currently using mostly or all government furniture. The use of government furniture was most frequent in Japan/Okinawa (39%) and least frequent in the United Kingdom (1.4%). Between 25 and 28 percent of Army, Air Force, and Marine Corps service members were using government furniture, while only 13 percent of Navy personnel reported using government furniture.

An overwhelming percentage (90%) of those responding preferred to use all or mostly all of their own furniture. Preference for one's own furniture ranged from 83 percent in Korea to 98 percent in the United Kingdom. This preference was also uniformly high across pay grade groups.

Among the 33 questions on satisfaction with housing, facilities, and services, there was one on the availability and quality of government furniture. Somewhat less than half of the respondents (44%) expressed dissatisfaction, about one-third were satisfied (34%) and the remainder said they were neither dissatisfied nor satisfied. Among the four Services, the Marine Corps expressed the highest percentage of dissatisfaction (54%) while Navy service members expressed the lowest (36%). Army respondents showed the highest percentage satisfied (39%) while the other three Services ranged from 30 to 32 percent satisfied.

Over half of the respondents in Italy (54%) and Korea (54%) expressed dissatisfaction with the availability and quality of government furniture. Respondents in the other three countries showed dissatisfaction between 37 percent (United Kingdom) and 45 percent (Japan/Okinawa). In contrast, satisfaction was reported by about one-quarter of the respondents in the United Kingdom, Italy, and Korea. Higher percentages of satisfaction were reported by service members in Japan/Okinawa (35%) and Germany (41%).

In evaluating loaner furniture (among those who used it), about two-thirds (68%) reported the quantity as adequate, 79 percent reported the size as appropriate, and 41 percent were somewhat or very satisfied with its condition. About one-quarter (24%) reported that the quantity of loaner furniture was less than needed and 21 percent reported that the size was too large or too small (mainly too small). About the same percentage (41%) who were satisfied with the condition of the furniture reported dissatisfaction. Condition of the loaner furniture was most often a source of dissatisfaction among the three characteristics measured (quantity, size, and condition). Differences were found among countries in evaluation of the loaner furniture. Sixteen to 38 percent reported the quantity of loaner furniture was less than needed with the lowest percentage in Japan/Okinawa and the highest in Italy. Service members in Italy were more likely to report their loaner furniture as too small (30%) than those in the other four countries (10 to 21%). Dissatisfaction with the condition of the furniture ranged from 36 percent in Germany to between 41 and 45 percent in the other countries. Marine Corps and Air Force respondents reported dissatisfaction with the furniture's condition more often than the other two Services (46 and 47%).

## PROBLEMS

### Most Serious Problems

Respondents were asked to select the three most serious problems (from a list of 21) that they and their families faced during the current tour. Table 7 shows those problems reported as the three most serious by at least 18 percent of one or more of the country/Service groups. All percentages of 18 percent or more are underlined. Problems reported by 18 percent or more of the sample are considered statistically different from the percentage that would be expected if choices were made at random (slightly over 14%). Therefore, selection by 18 percent or more suggests a definite tendency that the problems important to a significant number of service members.

The two most serious problems associated with living overseas are clearly permanent housing and initial housing expenses. These two housing problems were reported by service members more frequently than any of the other 19 choices and were reported to be serious problems by almost every one of the 12 country/Service groups.

Apart from housing, respondents in many of the country/Service groups reported having problems with spouse employment, language and cultural differences, medical/dental care, and working conditions. Working condition problems were frequently reported in the European countries.

Problems unique to particular country/service samples included the local telephone service in Italy, transportation in Korea, and safety/security for Navy personnel in Italy and Air Force personnel in Korea. Security was the most frequently selected problem among Navy personnel in Italy because of the high vandalism and crime rates in Naples. Restriction on shipment of privately owned automobiles to Japan/Okinawa was a problem to all three Services in that country. For Air Force personnel in the United Kingdom and Germany, vehicle problems were more a matter of repair and inspection costs.

A consistent pattern of responses was found among respondents who selected permanent housing as a problem. These respondents showed a higher percentage of dissatisfaction than those who did not report permanent housing as a problem with: the wait for government family housing, assignment and referral services of the housing





office, overall comfort and adequacy of the permanent residence, and most of the specific aspects of satisfaction with housing, facilities, and services. They also had more negative assessments of the effects of living conditions on job performance, career intentions, and willingness to choose the present assignment again.

### Spouse Employment

Almost two-thirds (64%) of the spouses were reported as currently unemployed in the foreign location. By comparison, among service members whose previous tour was in CONUS, 42 percent reported their spouses were unemployed during that tour.

Regarding spouse employment in the foreign locations, 43 percent were not looking for work, while 21 percent were seeking employment. Only 16 percent of all the spouses reported to be working were employed full time, 16 percent employed part time or intermittently, and another 3 percent were in the military. By comparison, spouse employment during the last tour in CONUS showed 37 percent not looking for work and 5 percent seeking employment. Over one-third (36%) were reported working full time, 17 percent worked part time or intermittently, and another 5 percent were in the military.

Over half (55%) of the spouses currently living overseas were reported to have no income for the previous month. Spouse unemployment was not significantly different as a function of the pay grade level of the service members. However, enlisted spouses who were working tended to have lower monthly incomes than spouses of officers. Across pay grade groups, countries, and Services, the median spouse income was \$600 per month.

## **IMPROVEMENT AREAS**

Respondents were asked to select four areas from a list of 14 in which they felt that construction, expansion, leasing, or renovation was needed to improve living conditions at their installation. Any rate of selection of these items over 30 percent represents a statistically meaningful choice (i.e., better than random choices). In Table 8, only those areas that were selected by 30 percent or more of at least one country/Service group are shown, with rates of 30 percent or more underlined.

Across all of the countries surveyed, family housing was the overwhelming choice for most needed improvement area, regardless of Service. Two other frequently selected areas were medical facilities (especially in Italy and Korea) and commissaries. Parking facilities represented a unique problem for Air Force personnel in the United Kingdom, Germany, and Japan/Okinawa and Navy personnel in Italy. Temporary lodging was chosen very frequently by service members in Japan/Okinawa, as well as by Air Force personnel in the United Kingdom.

Potential areas of needed improvement that were not often selected included youth and child care facilities dental care facilities, and religious facilities. It should be noted, however, that youth and child care facilities were chosen frequently by those service members with children in their households.

## **POLICY PROPOSALS**

Respondents were asked to consider 10 proposals that would affect housing policies. Six dealt with assignment and construction policies for government family housing and four with monetary allowances related to choices made by service members.

Table 8  
Highly Selected Improvement Areas by Country and Service

Improvement Area	United Kingdom			Germany			Italy			Japan/Okinawa			Korea		
	Navy	Air Force	Army	Navy	Air Force	Army	Navy	Air Force	Army	Navy	Air Force	Marine Corps	Army	Air Force	
Family housing	56.5	68.3	61.6	58.9	55.3	58.9	44.5	60.8	71.8	63.3	73.0		72.0	68.4	
Medical facilities	33.1	20.7	38.0	48.5	38.6	48.5	43.6	72.2	28.8	37.5	43.8		36.3	53.3	
Commissaries	58.7	31.9	36.3	32.4	36.9	32.4	43.1	31.9	33.9	21.5	40.0		54.2	31.9	
Temporary lodging facilities	23.6	48.1	31.5	28.6	34.3	28.6	32.1	38.9	45.5	49.7	37.1		28.8	31.9	
Parking facilities	29.7	56.6	27.0	32.9	56.8	32.9	50.9	19.5	26.7	46.6	10.5		15.5	27.1	
Work areas	14.8	31.1	30.8	23.3	32.6	23.3	23.9	26.7	18.5	30.2	23.6		33.4	28.0	
Exchanges	52.2	24.4	27.4	25.9	23.7	25.9	32.9	20.8	27.7	22.4	27.8		19.7	30.8	
Recreation facilities	32.0	23.7	19.7	23.4	18.4	23.4	22.8	30.0	32.7	27.8	25.7		23.5	22.8	
Family entertainment	34.9	21.3	21.9	27.8	19.5	27.8	31.2	28.9	26.2	23.9	22.7		24.8	19.3	
Troop barracks, dorms	4.9	18.0	39.8	29.1	28.7	29.1	10.0	15.6	13.0	18.7	32.7		34.4	23.1	

<sup>a</sup>Improvement areas selected by 30 percent or more of at least one country/Service group are listed. Response percentages over 30 percent are underlined.

The most highly favored of the assignment and construction proposals were the extension of eligibility for government family housing to the lower enlisted pay grade groups and construction of government family housing for them. These two proposals were favored by the majority of respondents (from 52 to 74%) in all Services stationed in every country, with the exception of Army personnel in Korea. Another proposal that was favored by the majority (60%) was assignment of family housing solely on the basis of bedroom requirement, but retaining designated enlisted and officer housing. Only about one-third of the respondents were opposed to this idea.

Almost one-half (49%) of the respondents opposed extending family housing eligibility to those currently not eligible and 54 percent opposed construction of housing for the lower grade enlisted personnel if these actions had negative consequences such as increased waiting list times and delay of all other construction. The E-1 to E-3 pay grade groups were more in favor of these proposals than were higher pay grade groups that already qualify for housing. The last of the six assignment proposals suggested making no changes to the existing assignment procedures. This proposal was generally opposed (from 50% of Army personnel in Korea to 71% of Air Force personnel in Germany).

To a large extent, the attitudes of respondents living overseas toward housing assignment proposals were similar to those found in the 1982 DoD Government Housing Preference Survey in CONUS (Lawson et al., 1983). See Appendix C for comparisons of responses from the two studies.

Two of the four monetary allowance proposals were very popular with the respondents. These included providing a maintenance allowance for service members doing minor repairs and maintenance on their family housing units and allowing family housing residents to retain some of their BAQ in exchange for living in units with fewer bedrooms. Approximately 65 percent of the respondents were in favor of these two proposals, with only 20 percent opposed and the remainder undecided. The respondents stationed in the United Kingdom were overwhelmingly in favor of the maintenance allowance (75% in favor). Interview and write-in comments suggested that this favorability toward a maintenance allowance may have stemmed from their dissatisfaction with local national repair standards and craftsmanship.

Providing an annual utility allowance that would permit service members to keep any amount they did not use and would require payment for usage over the allowance was clearly favored by the majority of respondents in the United Kingdom (55%) and Italy (59%). This favorability was strongest among Air Force personnel. The utility allowance proposal was also slightly more favored than opposed in the other countries. However, allowing service members to pay extra beyond their BAQ in exchange for housing units with more bedrooms than they were qualified to have was met with opposition. A majority of the respondents (55 to 63%) were opposed to this proposal in every country and in most Services (with the exception of Navy personnel in the United Kingdom and Italy).

### **SPECIAL GROUPS**

Although the main objective of the study was to obtain information from accompanied military personnel, responses of personnel unaccompanied personnel and members of other "special groups" were analyzed. Special groups were identified by their responses to selected questionnaire items as accompanied female service members, single parents, those who indicated a preference for leaving the service following completion of

the current tour, service members married to local nationals, respondents with non-sponsored dependents, and the unaccompanied. In general, responses of the special groups mirrored those of the other respondents on questions about housing satisfaction, selecting areas needing improvement, and policy proposals. Only the groups that showed some meaningful differences from the target population are discussed here.

#### Respondents Preferring to Leave the Service (Excluding those who have Already Served 20 Years or More)

Very few respondents reported a preference for leaving the Service (about 5% in each country). In general, those preferring to leave the Service had more negative attitudes about living overseas than did those with full military career intentions. Compared to those not preferring to leave, service members preferring to leave the Service were much less likely to have had a sponsor when they arrived at their current duty station, more often reported working conditions as a problem, and were more likely to report that their living conditions had a negative impact on their job performance and career intentions.

#### Comparisons by Spouse Nationalities

Comparisons by the spouse nationality (U.S. born, local nationals, or other foreign nationals) resulted in some consistent findings across all countries and Services. As would be expected, service members with local national spouses were more likely than the others to prefer extensions or second tours in the present country. Service members with local national spouses also reported less reliance on U.S. Government facilities than the other groups, and they more often lived in and preferred to live in economy housing. Those with other foreign national spouses more often than the others preferred second tours in a different foreign country. Respondents with U.S. born spouses more often preferred to return to CONUS. In all countries, reliance on the service member for transportation was much higher among spouses who were not born in the United States.

#### Respondents with Nonsponsored Dependents

In the Asian countries, there were a significant number of service members who had nonsponsored dependents living with them. Almost one-quarter of the Marine Corps personnel stationed in Japan/Okinawa had nonsponsored dependents. One-fourth of the Army sample and over two-thirds of the Air Force personnel in Korea also had nonsponsored dependents. In contrast, less than 3 percent of the samples in the European countries had nonsponsored dependents.

Special problems were associated with having nonsponsored dependents. These respondents tended to live in economy housing, yet strongly preferred government housing. As a result of this, they expressed more dissatisfaction with their residences than those with sponsored dependents. They also reported transportation problems more frequently than did the others. Perhaps of prime significance, they were much more likely than the others to report that their living conditions had negative effects on their job performance, military career intentions, and their willingness to choose the present assignment again.

#### Unaccompanied Respondents

Like those respondents with nonsponsored dependents, unaccompanied service members in the obtained sample were concentrated in Japan/Okinawa and Korea. Forty-four percent of the Marine Corps sample in Japan/Okinawa were unaccompanied. Over half of

the Army personnel and close to half of the Air Force personnel in Korea were also unaccompanied. These respondents most often reported reasons beyond their control (e.g., lack of government housing) or spouse/dependent reasons (e.g., spouse job) for their unaccompanied status.

Special problems were associated with being unaccompanied. As would be expected, they reported family separation as their most serious problem whereas accompanied personnel reported family housing. Also, unaccompanied personnel in all Services in both Japan/Okinawa and Korea felt that their job performance suffered because of their unaccompanied status, lived almost exclusively in barracks, and were very dissatisfied with their housing. They also reported that these living conditions negatively affected their job performance, career intentions, and willingness to choose the present assignment again.

### EFFECTS OF LIVING CONDITIONS

The effect of service members' living conditions on military readiness and retention was indirectly measured by asking the respondents if their living conditions affected their job performance and career intentions. Table 9 shows the responses to the two questions for each country and Service as well as for all countries combined.

Service members reported that their living conditions had a greater effect on their job performance than on their career intentions. One-half to two-thirds of the respondents by country/Service perceived that their living conditions affected their job performance. The direction of the perceived effects varied somewhat by country. Of those who reported an effect, a large majority in the United Kingdom (66%), Italy (70%), and Korea (67%) saw the effect as negative. In Germany and Japan/Okinawa, those perceiving negative and positive effects were split closer to 50-50.

The perceived effects of living conditions on military career intentions were similar to those for job performance. In all countries except Japan/Okinawa, the majority (from 56% in Germany to 68% in the United Kingdom) who reported an effect said it was negative.

Pay grade group showed a small but statistically reliable relationship with the service members' assessment of the effects of living conditions on both job performance and military career intentions. The lower enlisted grades (E-1 to E-6) had more negative ratings of the effects, whereas the senior officer group (O-4 to O-6) had the most positive ratings for both job performance and military career intentions.

Type of residence also showed statistically reliable relationships with perceived effects of living conditions on both job performance and military career intentions. Occupants of government-owned housing had slightly more positive ratings than occupants of the other housing types. Residents of government-leased, economy, and other housing types were on the negative side of the scale while those in government-owned housing were on the positive side.

Across countries and Services, service member overall satisfaction with the comfort and adequacy of the residence was the variable most consistently related to perceived effects of living conditions. Those expressing higher satisfaction with their residences were more likely to report positive effects of living conditions. Similarly, for most of the country/Service groups, the effect of the temporary lodging experience on attitude

Table 9

### Job Performance

AD-A159 780 DEPARTMENT OF DEFENSE SURVEY OF LIVING CONDITIONS  
OVERSEAS 1984 VOLUME 2. (U) NAVY PERSONNEL RESEARCH AND  
DEVELOPMENT CENTER SAN DIEGO CA J K LAWSON ET AL.  
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DEPARTMENT OF DEFENSE SURVEY OF LIVING CONDITIONS  
OVERSEAS 1984 VOLUME 2. (U) NAVY PERSONNEL RESEARCH AND  
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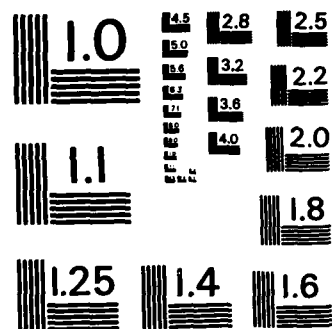
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MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS-1963-A



toward living overseas was also related to perception of the effect of living conditions. Respondents who said that their attitude had worsened as a result of the temporary lodging experience were more likely to report negative living condition effects and less willingness to choose the present assignment again. Satisfaction with the residence appears to be an important component of the living conditions and is perceived to influence job performance, military career intentions, and willingness to choose the present assignment again.

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**APPENDIX A**  
**SURVEY QUESTIONNAIRE**



OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE  
WASHINGTON, DC 20301

16 MAR 1984

MANPOWER  
RESERVE AFFAIRS  
AND LOGISTICS

Dear Servicemember:

A lot of money will be spent in the next few years to improve living conditions for you and fellow servicemembers and families overseas. You can help make sure that it is spent on what is needed most.

Please take time to fill out the attached questionnaire and mail it back. Try to get it done within the next five days or your opinions might get here too late to count. If you have any questions about the survey, please call your local Housing Office.

Thank you for your time and for your thoughtful answers. Reports Control Symbol DD-M(OT)8402 has been assigned this reporting requirement.

Robert A. Stone  
Deputy Assistant Secretary of Defense  
(Installations)

Attachment

Excellent Installations – The Foundation Of Defense

A-1

**SURVEY OF LIVING CONDITIONS OVERSEAS 1984**

**You should complete the questionnaire if your answers are "yes" to BOTH of the following questions:**

- Do you have any dependents (see definition, p. 2. of booklet)? ☐ Yes ☐ No  
 • Are you living in or homeported in Japan/Okinawa, Korea, Germany, Italy, or United Kingdom? ☐ Yes ☐ No

**If your answer is "no" to EITHER of the questions above, send this answer form back in the envelope provided. DO NOT COMPLETE the rest of the questionnaire.**

1. Read each question and all possible answers carefully before choosing your answer.
2. Select the number of the answer that best applies and PRINT it in the space provided for the item, as shown below. All answers must be put on this form.

**Example: Miles to shopping center**

0	3
---	---

3. There are no "right" or "wrong" answers. We are interested in your feelings, opinions, and experiences related to living conditions in foreign areas.
4. Additional comments may be written in Section X on the last page of the questionnaire. If you have comments, tear off the last page of the questionnaire when you have finished.
5. Return your completed answer form and comment page in the envelope provided (Return address: Navy Personnel Research and Development Center, Code 72, San Diego, CA 92152). Do not return the questionnaire booklet.

I. BACKGROUND	II. UNACCOMPANIED	III. FINDING PERMANENT HOUSING
1. <input type="checkbox"/>	<b>ACCOMPANIED PERSONNEL</b> check here . . . . . <input type="checkbox"/> and skip to question 29.	29. <input type="checkbox"/>
2. <input type="checkbox"/>		40. <input type="checkbox"/>
3. <input type="checkbox"/>	<b>UNACCOMPANIED PERSONNEL</b> continue with question 22.	30. <input type="checkbox"/>
4. <input type="checkbox"/>		31. <input type="checkbox"/>
5. <input type="checkbox"/>	22. <input type="checkbox"/>	32. <input type="checkbox"/>
6. <input type="checkbox"/>	23. Time unaccompanied	33. <input type="checkbox"/>
7. <input type="checkbox"/>	<input type="checkbox"/> months	1: Continue with question 44 2: Skip to question 104, p. 13
8. <input type="checkbox"/>	24. Major reason	
9. <input type="checkbox"/>	<input type="checkbox"/>	34. <input type="checkbox"/>
10. <input type="checkbox"/>	25. Second reason	35. <input type="checkbox"/>
11. <input type="checkbox"/>	<input type="checkbox"/>	36. <input type="checkbox"/>
12. <input type="checkbox"/>	26. Third reason	37. <input type="checkbox"/>
13. <input type="checkbox"/>	<input type="checkbox"/>	38. <input type="checkbox"/>
	27. <input type="checkbox"/>	39. <input type="checkbox"/>
	28. <input type="checkbox"/>	

IV. LOCATION & COST OF PERMANENT HOUSING	VI. TEMPORARY LODGING FACILITIES	VIII. POLICY PROPOSALS
<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> 44. <input type="checkbox"/>  45. <input type="checkbox"/>  46. <input type="checkbox"/>  47. <input type="checkbox"/>  48. Time in residence  <div style="border: 1px solid black; width: 40px; height: 20px; display: flex; align-items: center; margin: 2px;"> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> </div> months  49. <input type="checkbox"/>  50. Out-of-pocket expenses  (to nearest \$10)  \$ <div style="border: 1px solid black; width: 40px; height: 20px; display: flex; align-items: center; margin: 2px;"> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> </div> 00 </div> <div style="width: 48%;"> 51. <input type="checkbox"/>  52. Miles to post  <div style="border: 1px solid black; width: 40px; height: 20px; display: flex; align-items: center; margin: 2px;"> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> </div> miles  53. Commuting time  <div style="border: 1px solid black; width: 60px; height: 20px; display: flex; align-items: center; margin: 2px;"> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> </div> minutes  54. <input type="checkbox"/>  55. <input type="checkbox"/>  56. <input type="checkbox"/> </div> </div>	104. Time unaccompanied <div style="border: 1px solid black; width: 40px; height: 20px; display: flex; align-items: center; margin: 2px;"> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> </div> weeks 105. <input type="checkbox"/> 106. <input type="checkbox"/> 107. Time in tempo- rary facilities <div style="border: 1px solid black; width: 40px; height: 20px; display: flex; align-items: center; margin: 2px;"> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> </div> days 108. Time drawing TLA <div style="border: 1px solid black; width: 40px; height: 20px; display: flex; align-items: center; margin: 2px;"> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> </div> days 109. <input type="checkbox"/> 110. <input type="checkbox"/> 111. <input type="checkbox"/> 112. <input type="checkbox"/> 113. <input type="checkbox"/> 114. <input type="checkbox"/> 115. <input type="checkbox"/> 116. <input type="checkbox"/> 117. <input type="checkbox"/> 118. <input type="checkbox"/> 119. <input type="checkbox"/> 120. <input type="checkbox"/> 121. <input type="checkbox"/> 122. <input type="checkbox"/>	<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> 127. <input type="checkbox"/>  128. <input type="checkbox"/>  129. <input type="checkbox"/>  130. <input type="checkbox"/>  131. <input type="checkbox"/> </div> <div style="width: 48%;"> 132. <input type="checkbox"/>  133. <input type="checkbox"/>  134. <input type="checkbox"/>  135. <input type="checkbox"/>  136. <input type="checkbox"/> </div> </div>
V. SATISFACTION WITH PERMANENT HOUSING, FACILITIES, AND SERVICES		IX. GENERAL TOPICS
<div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"> 57. <input type="checkbox"/> 58. <input type="checkbox"/> 59. <input type="checkbox"/> 60. <input type="checkbox"/> 61. <input type="checkbox"/> 62. <input type="checkbox"/> 63. <input type="checkbox"/> 64. <input type="checkbox"/> 65. <input type="checkbox"/> 66. <input type="checkbox"/> 67. <input type="checkbox"/> 68. <input type="checkbox"/> 69. <input type="checkbox"/> 70. <input type="checkbox"/> 71. <input type="checkbox"/> 72. <input type="checkbox"/> </div> <div style="width: 33%;"> 73. <input type="checkbox"/> 74. <input type="checkbox"/> 75. <input type="checkbox"/> 76. <input type="checkbox"/> 77. <input type="checkbox"/> 78. <input type="checkbox"/> 79. <input type="checkbox"/> 80. <input type="checkbox"/> 81. <input type="checkbox"/> 82. <input type="checkbox"/> 83. <input type="checkbox"/> 84. <input type="checkbox"/> 85. <input type="checkbox"/> 86. <input type="checkbox"/> 87. <input type="checkbox"/> 88. <input type="checkbox"/> 89. <input type="checkbox"/> </div> <div style="width: 33%;"> 90. <input type="checkbox"/> 91. <input type="checkbox"/> 92. <input type="checkbox"/> 93. <input type="checkbox"/> 94. <input type="checkbox"/> 95. <input type="checkbox"/> 96. <input type="checkbox"/> 97. <input type="checkbox"/> 98. <input type="checkbox"/> 99. <input type="checkbox"/> 100. <input type="checkbox"/> 101. <input type="checkbox"/> 102. <input type="checkbox"/> 103. <input type="checkbox"/> </div> </div>	112. <input type="checkbox"/> 113. <input type="checkbox"/> 114. <input type="checkbox"/> 115. <input type="checkbox"/> 116. <input type="checkbox"/> 117. <input type="checkbox"/> 118. <input type="checkbox"/> 119. <input type="checkbox"/> 120. <input type="checkbox"/> 121. <input type="checkbox"/> 122. <input type="checkbox"/>	137. <input type="checkbox"/> 138. <input type="checkbox"/> 139. <input type="checkbox"/> 140. Most serious <div style="border: 1px solid black; width: 40px; height: 20px; display: flex; align-items: center; margin: 2px;"> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> </div> 141. Second most serious <div style="border: 1px solid black; width: 40px; height: 20px; display: flex; align-items: center; margin: 2px;"> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> </div> 142. Third most serious <div style="border: 1px solid black; width: 40px; height: 20px; display: flex; align-items: center; margin: 2px;"> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> </div> 143. <input type="checkbox"/> 144. <input type="checkbox"/>  <p style="font-size: small;">If you are NOT accompanied by your spouse, you have now completed the questionnaire. You may add any written comments on the last page of the questionnaire. Then tear it off and return it with this answer form in the envelope provided.</p> <p style="font-size: small;">Thank you for your cooperation.</p> <p style="font-size: small;">If you are ACCOMPANIED by your spouse, please continue with question 145.</p> 145. <input type="checkbox"/> 146. <input type="checkbox"/> 147. Monthly family income (to nearest \$10) \$ <div style="border: 1px solid black; width: 40px; height: 20px; display: flex; align-items: center; margin: 2px;"> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> </div> 00 148. Monthly spouse income (to nearest \$10) \$ <div style="border: 1px solid black; width: 40px; height: 20px; display: flex; align-items: center; margin: 2px;"> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> </div> 00  <p style="font-size: small;">You have now completed the survey. Please write any additional comments on the last page of the questionnaire, tear it off, and return it with this answer form in the envelope provided.</p> <p style="font-size: small;">Thank you for your cooperation.</p>
	VII. IMPROVE- MENTS NEEDED	
	123. Most important <div style="border: 1px solid black; width: 40px; height: 20px; display: flex; align-items: center; margin: 2px;"> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> </div> 124. Second most important <div style="border: 1px solid black; width: 40px; height: 20px; display: flex; align-items: center; margin: 2px;"> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> </div> 125. Third most important <div style="border: 1px solid black; width: 40px; height: 20px; display: flex; align-items: center; margin: 2px;"> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> </div> 126. Fourth most important <div style="border: 1px solid black; width: 40px; height: 20px; display: flex; align-items: center; margin: 2px;"> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; width: 20px; height: 15px;"></span> </div>	

# DEPARTMENT OF DEFENSE SURVEY OF LIVING CONDITIONS OVERSEAS 1984



Developed by  
The Navy Personnel Research and Development Center  
San Diego, California 92152

#### PRIVACY ACT STATEMENT

Public Law 93-579, called the Privacy Act of 1974, requires that you be informed of the purposes and uses to be made of the information collected. The Department of Defense may collect the information requested in the Survey of Living Conditions Overseas in 1984 under the authority of 5 United States Code 301.

The information collected in the questionnaire will be used by the Department of Defense and the military departments to evaluate existing and proposed policies in foreign areas and to support foreign housing requirements to Congress.

Providing information in this form is voluntary. Failure to respond to any particular questions will not result in any penalty to the respondent except the possible lack of representation of your views in the final results and outcomes.

**Carefully read each question and all possible answers before choosing your answer. Mark your answers ON THE ANSWER FORM that you have separated from this booklet.**

## I. BACKGROUND

### 1. In what service are you serving?

- |         |                 |
|---------|-----------------|
| 1. Army | 3. Marine Corps |
| 2. Navy | 4. Air Force    |

### 2. What is your paygrade?

- |         |                |         |
|---------|----------------|---------|
| 01. E-1 | 07. E-7        | 12. O-1 |
| 02. E-2 | 08. E-8        | 13. O-2 |
| 03. E-3 | 09. E-9        | 14. O-3 |
| 04. E-4 |                | 15. O-4 |
| 05. E-5 | 10. W-1 to W-2 | 16. O-5 |
| 06. E-6 | 11. W-3 to W-4 | 17. O-6 |

**NOTE:** Please be careful to use the proper answer number, e.g.,

If you are an E-5, enter

If you are an O-5, enter

### 3. What is your sex?

1. Male
2. Female

### 4. What was your marital status when you arrived at your current post, base, or duty station?

1. Married
2. Legally separated, divorced, or widowed
3. Single, never married

### 5. What is your current marital status?

1. I remain married to the same spouse.
2. I am married to a different spouse.
3. I have gotten married since arriving.
4. I have been legally separated, divorced, or widowed and have not remarried since arriving.
5. I remain single, never married.

### 6. What is your spouse's nationality and citizenship status?

0. I am not married.
1. U.S.-born
2. Host-country national, not yet a naturalized U.S. citizen
3. Host-country national, a naturalized U.S. citizen
4. National from another country, not yet a naturalized U.S. citizen
5. National from another country, a naturalized U.S. citizen



\* \* \* \* \* **IMPORTANT** \* \* \* \* \*

***Please note the definition of "dependent" below, then see the answer form for information on who should complete the questionnaire and instructions.***

**NOTE: "Dependent" means:**

**1. SPOUSE**

**or 2. UNMARRIED CHILD who is yours by . . .**

- a. birth,**
- b. legal adoption, OR**
- c. marriage (e.g., stepchild)**

**AND who is either . . .**

- a. under 21 years of age and is in fact dependent on you,**
- b. incapable of self-support because of a mental or physical incapacity and is in fact dependent on you for over one-half of his/her support, OR**
- c. enrolled in a full-time course of study at an approved institution of higher learning, is under 23 years of age, and is in fact dependent on you.**

**or 3. ADULT who is related by . . .**

- a. blood,**
- b. marriage (e.g., parent-in-law or stepparent), OR**
- c. adoption**

**AND is**


- a. dependent on you for over one-half of his/her support, AND**
- b. eligible for a dependent I.D. card.**

## 7. Select the category that best describes your dependent situation.

1. Service member and spouse (no children)
2. Service member and spouse (with children)
3. Single parent service member (with or without relative(s))
4. Service member and spouse (with children and relative(s))
5. Service member and spouse (with relative(s) but no children)
6. Service member (with children and relative(s) but no spouse)
7. Service member (with relative(s) but no spouse nor children)
8. Dual career military (with or without children or relative(s))

Questions 8 to 12: Indicate how many of your dependents are in the following age groups.  
(Use the answers in the box below.)

- |          |                 |
|----------|-----------------|
| 0. None  | 5. Five         |
| 1. One   | 6. Six          |
| 2. Two   | 7. Seven        |
| 3. Three | 8. Eight        |
| 4. Four  | 9. Nine or more |

- 
8. Under 2 years
  9. 2 to 5 years
  10. 6 to 12 years
  11. 13 to 18 years
  12. 19 to 22 years

## 13. Are some or all of your dependents present at your foreign location?

0. No, none are present at my foreign location
1. Yes, some (command-sponsored)
2. Yes, all (command-sponsored)
3. Yes, some (not command-sponsored)
4. Yes, all (not command-sponsored)

See note below

**NOTE:** "Command-sponsored" means your dependents have been officially approved to accompany you at your post, base, or duty station, including the government paying for their transportation.

## 14. What is the total number of dependents presently living with you?

- |          |                 |
|----------|-----------------|
| 0. None  | 5. Five         |
| 1. One   | 6. Six          |
| 2. Two   | 7. Seven        |
| 3. Three | 8. Eight        |
| 4. Four  | 9. Nine or more |

15. Where is your current foreign assignment? (If you are on a ship, indicate where the ship is currently homeported.)

- |                   |                  |
|-------------------|------------------|
| 1. United Kingdom | 4. Japan/Okinawa |
| 2. Germany        | 5. Korea         |
| 3. Italy          |                  |

16. What is the APO/FPO zip code at your current post, base, or duty station?

17. In all the time you have been on active duty prior to your present assignment, how many months have you spent in foreign locations? (If this is your first foreign tour, enter "00".)

**NOTE:** Navy & Marine Corps personnel, please count total time assigned to both shore and sea duty in foreign locations.

18. As of today, how many months have you been assigned to your present post, base or duty station? Please include any extensions you may have had. (If less than one month, enter "01".)

19. How many months do you have left in your current tour? (If less than one month, enter "01".)

20. Do you intend to remain in the service for at least 20 years?

1. Definitely not
2. Probably not
3. Uncertain
4. Probably yes
5. Definitely yes
6. Already have 20 years or more service

21. What would you like to do following completion of your current tour?

1. Another full tour in present country
2. Extend (for less than a full tour) in current location
3. Another full tour in different foreign country
4. Return to CONUS
5. Leave the service
6. Unsure/no preference at this time

## II. UNACCOMPANIED

**NOTE:** *You are accompanied if some or all of your dependents*

- *are with you, OR*
- *were with you and have already left.* } *Accompanied skip to question 29.*

*You are unaccompanied if you*

- *have dependents, BUT*
- *they are not with you.* } *Unaccompanied continue with question 22.*

22. What is your present unaccompanied status at your current post, base or duty station?

1. Permanently unaccompanied (dependents will live elsewhere for the duration of this tour).
2. Permanently unaccompanied but seeking command sponsorship for dependents to join me.
3. Temporarily unaccompanied — beginning of tour (dependents are expected to arrive later).

23. How many months have you been unaccompanied at your current post, base or duty station?  
(If less than one month, answer "01".)

Questions 24 to 26: Indicate the reasons that best describe why you are presently unaccompanied. (Use answers from the box below.)

01. Dependents were not command sponsored.
02. Service member preferred an unaccompanied tour.
03. Lack of opportunity for dependents to pursue special interests (e.g., hobbies, sports teams).
04. Career or job considerations of spouse (e.g., keep a good job in CONUS).
05. Dependents wanted to settle into community of last post, base or duty station.
06. Service member's work schedule would cause family hardship.
07. Inadequate notice to make all plans for traveling together.
08. Settlement of personal affairs required more time (e.g., selling a house).
09. Not authorized concurrent travel for dependents unless suitable housing is available upon arrival.
10. Poor timing for dependents to move (e.g., finish school year).
11. Waiting for an opening in military family housing.
12. Lack of suitable economy (civilian) housing. (SEE NOTE BELOW)
13. High cost of relocation.
14. High cost of economy (civilian) housing.
15. Lack of DoD Dependents Schools in the area.
16. Other. (You may explain in the comment section.)

24. Major reason

25. Second reason

26. Third reason

Enter "00" where you feel none of the reasons fit

**NOTE:** "Economy (civilian) housing" means:

—Nongovernment quarters in the private community (including hotels/motels) that a service member is renting or owns.

**APPENDIX B**  
**SUMMARY OF WRITE-IN COMMENTS**

**X. WRITE-IN COMMENTS**

If you would like to make any additional comments or suggestions, please feel free to do so on this page of the questionnaire. Then detach it from the rest of the questionnaire and return it along with your answer sheet.

**COMMENTS/SUGGESTIONS CONCERNING FOREIGN FAMILY HOUSING****COMMENTS/SUGGESTIONS CONCERNING SUPPORT FACILITIES AND SERVICES****MISCELLANEOUS COMMENTS/SUGGESTIONS**

THANK YOU FOR YOUR PARTICIPATION

143. What was your sponsor's attitude toward living conditions at this post, base or duty station?
0. Don't know
  1. No sponsor
  2. Very negative
  3. Somewhat negative
  4. Equally negative and positive
  5. Somewhat positive
  6. Very positive
144. In your opinion, how helpful was your sponsor in assisting the family's adjustment to the new post, base or duty station?
1. No sponsor provided
  2. No help needed
  3. Sponsor unavailable at arrival
  4. Not at all helpful
  5. Somewhat helpful
  6. Very helpful

**NOTE:** *If you are not accompanied by your spouse at your current post, base, or duty station, you have now completed the questionnaire. You may add any written comments on the last page of the questionnaire. THANK YOU FOR YOUR COOPERATION.*

*If you are accompanied by your spouse, please continue with question 145.*

145. Select the category that best describes your spouse's current employment status (paid employment).
1. Spouse is presently not employed and has not been looking for work.
  2. Spouse is presently not employed and is looking for work.
  3. Spouse is presently employed part time or intermittently.
  4. Spouse is presently employed full time (civilian).
  5. Spouse is in the military.
146. If your previous tour was in CONUS, which of the following best describes your spouse's employment status in CONUS at the time you received your orders?
0. Previous tour was not in CONUS.
  1. Spouse was not employed and was not looking for work.
  2. Spouse was not employed but was looking for work.
  3. Spouse was employed part time or intermittently.
  4. Spouse was employed full time (civilian).
  5. Spouse was in the military.
147. What was your family's TOTAL INCOME before taxes and other deductions from all military and civilian sources during the last calendar month? *(Estimate to the nearest \$10.)*
148. What was your spouse's TOTAL INCOME before taxes and other deductions from all military and civilian sources during the last calendar month? *(Estimate to the nearest \$10.)*

## IX. GENERAL TOPICS

Questions 137 and 138: Indicate the effects of the following aspects of your experience.  
(Use answers from the box below.)

1. Very negative
2. Somewhat negative
3. No effect
4. Somewhat positive
5. Very positive

137. Which best describes the effect that living conditions on this tour (housing, support facilities, costs, transportation, etc.) have had on your job performance?
138. Which best describes the effect that living conditions on this tour (housing, support facilities, costs, transportation, etc.) have had on your military career intentions?
139. Thinking about living conditions on this tour, if you had a choice and you had it to do over, would you choose your present assignment?
1. Definitely not
  2. Probably not
  3. Unsure either way
  4. Probably yes
  5. Definitely yes

Questions 140 to 142: Indicate the 3 MOST SERIOUS problem areas, if any, that you (and your dependents, if accompanied) have encountered living in your present foreign area. (Select from items in the box below.)

01. Vehicles (shipping, insurance, inspection)
02. Shipping and storing household goods
03. Language and cultural differences
04. Temporary lodging facilities
05. Permanent housing
06. Working conditions (service member)
07. Transportation
08. Initial housing costs (deposits, fixtures, etc.)
09. Local telephone service
10. Living expenses (including utilities)
11. Spouse employment
12. Child care
13. Schools
14. Recreation and entertainment
15. Shopping
16. Medical/dental care
17. Family adjustment to the new situation
18. Security
19. Utility services (other than costs)
20. Separation and related problems (homesickness, family problems, communication, emergencies, etc.) because of unaccompanied status
21. Other (you may explain in comment section)

140. Most serious
141. Second most serious
142. Third most serious


Enter "00" if you run out of serious problems.



## VIII. POLICY PROPOSALS

Questions 127 to 136: Indicate how much you FAVOR or OPPOSE each of the proposals below which may affect government family housing policy in foreign areas, if implemented. (Use answers from the box below.)

- |    |                 |
|----|-----------------|
| 0. | No opinion      |
| 1. | Strongly oppose |
| 2. | Somewhat oppose |
| 3. | Undecided       |
| 4. | Somewhat favor  |
| 5. | Strongly favor  |

- 
127. Extend eligibility for assignment to government family housing to all service members with dependents, regardless of pay grade.
128. Assign government family housing solely on the basis of bedroom requirements, but retain designated officer and enlisted housing.
129. Construct family housing for personnel (with dependents) in pay grades E-1 to E-3 and E-4 (2 years or less service).
130. Construct family housing for personnel (with dependents) in pay grades E-1 to E-3 and E-4 (2 years or less service) even if it delays construction of all other government family housing.
131. Extend eligibility for government family housing to personnel (with dependents) in pay grades E-1 to E-3 and E-4 (2 years or less service), even if time on the waiting list increases for everyone else.
132. Make no change to the existing assignment procedures for government family housing.
133. Provide an annual utility allowance (based on family size, housing size, and location) allowing you to keep any amount you did not spend on utilities and requiring you to pay out-of-pocket for any amount over your allowance.
134. Provide a reasonable allowance to occupants for doing selected minor repairs and maintenance on their units, over and above what would normally be expected of them.
135. Allow service personnel to get housing units with more bedrooms than they are qualified to have if they pay an additional amount of not more than 25% of their BAQ.
136. Allow service members to retain not more than 25% of their BAQ if they live in housing units with fewer bedrooms than they are qualified to have.

## VII. IMPROVEMENTS NEEDED

Questions 123 to 126: Below is a list of areas where construction, expansion, leasing, or renovation may be needed to improve living and working conditions at your current post, base, or duty station. Choose up to FOUR of the 14 possible areas listed in the box below where you feel improvements are most needed.

01. Youth facilities
02. Exchanges
03. Commissaries
04. Child care facilities
05. Recreation facilities
06. Medical facilities
07. Dental facilities
08. Family entertainment facilities (e.g., bowling alleys, movie theatres)
09. Troop barracks, dorms
10. Family housing
11. Temporary lodging facilities
12. Parking facilities
13. Work areas
14. Religious facilities

123. Most important

124. Second most important

125. Third most important


126. Fourth most important

*Enter "00" if you run out of areas needing improvement.*

108. How many days did you draw Temporary Living Allowance (TLA) at your current post, base or duty station? *(If still drawing, indicate number of days.)*
109. What type was your last (current or most recent) temporary residence at this post, base or duty station?
1. Government-owned quarters
  2. Government-leased quarters
  3. Economy quarters
110. Because of the experience in temporary lodging facilities:
1. A less than satisfactory choice of permanent housing was made.
  2. My choice of permanent housing was not affected.
  3. A satisfactory and suitable choice of permanent housing was made.
111. Because of the experience in temporary lodging facilities, my attitude toward living in a foreign location:
1. Worsened.
  2. Was not affected.
  3. Improved.

Questions 112 to 122: Indicate how satisfied you are/were with the following characteristics of your last temporary residence during this tour. *(Use answers from the box below.)*

0. Does not apply
1. Not available
2. Very dissatisfied
3. Somewhat dissatisfied
4. Neither dissatisfied nor satisfied
5. Somewhat satisfied
6. Very satisfied

- 
112. Personal safety and security
  113. Privacy
  114. Kitchen, eating, and cooking facilities
  115. Laundry facilities
  116. Cleanliness
  117. Play space for children
  118. Size of quarters
  119. Convenience to post, base or duty station
  120. Convenience to post or base facilities
  121. Overall comfort and adequacy
  122. Cost

102. How satisfied were you with the condition of the loaner furniture?
0. Does not apply; did not use
  1. Very dissatisfied
  2. Somewhat dissatisfied
  3. Neither dissatisfied nor satisfied
  4. Somewhat satisfied
  5. Very satisfied
103. Considering the size of your housing unit, how appropriate was the size of loaner furniture provided to you?
0. Does not apply; did not use
  1. Too small
  2. About the right size
  3. Too large

## VI. TEMPORARY LODGING FACILITIES

**NOTE:** *If you did not live in temporary lodging facilities (see definition, p. 8) at your present post, base or duty station, skip to question 123, page 15.*

104. How many weeks were you unaccompanied at your present post, base or duty station before your dependents arrived?
- (If dependents arrived at the same time you did, enter "000"; if presently unaccompanied, enter "999".)*
105. When you arrived at your present post, base or duty station, what type of temporary lodging facilities did you occupy?
1. Government-owned quarters
  2. Government-leased quarters
  3. Economy (civilian) quarters
106. Assuming all types of facilities were available, which would you (and your dependents, if accompanied) have preferred?
1. Government-owned quarters
  2. Government-leased quarters
  3. Economy (civilian) quarters
107. How many days did you (and your dependents, if accompanied) live in temporary lodging facilities before you were assigned to permanent government quarters or you leased quarters in the (civilian) economy? *(If presently in temporary lodging facilities, how many days to date?)*

Questions 90 to 98: Indicate which facilities you use to meet your needs. *(Use answers from the box below.)*

- 0. Does not apply
- 1. Not available
- 2. Always use economy facilities
- 3. Mostly use economy facilities
- 4. Use about half economy and half U.S. government facilities
- 5. Mostly use U.S. government facilities
- 6. Always use U.S. government facilities

90. Food shopping facilities
91. Non-food shopping facilities
92. Medical/dental facilities
93. School facilities
94. Recreation (sports) facilities
95. Entertainment (theatre, etc.) facilities
96. Religious facilities
97. Library facilities
98. Child care facilities

99. Which of the following best describes the furnishings at your current location? *(Do not consider appliances.)*

- 1. Using all my own furniture
- 2. Using mostly my own furniture and some government furniture
- 3. Using mostly government furniture and some of my own furniture
- 4. Using all government furniture

100. Which of the following would you prefer? *(Do not consider appliances.)*

- 1. To use all my own furniture
- 2. To use mostly my own furniture and some government furniture
- 3. To use mostly government furniture and some of my own furniture
- 4. To use all government furniture

101. How adequate was the quantity of loaner furniture received while awaiting the arrival of your own?

- 0. Does not apply; did not use loaner furniture
- 1. Less than needed
- 2. Adequate
- 3. More than needed

# V. SATISFACTION WITH PERMANENT HOUSING, FACILITIES, AND SERVICES

Questions 57 to 89: Indicate your opinion of each of the following aspects of your present residence. *(Use answers from the box below.)*

0. Does not apply (e.g., no spouse or children)
1. Very dissatisfied
2. Somewhat dissatisfied
3. Neither dissatisfied nor satisfied
4. Somewhat satisfied
5. Very satisfied

57. Overall size of residence
58. Bedroom size(s)
59. Living/dining room sizes
60. Number of bedrooms
61. Number of bathrooms
62. Operating condition of the kitchen appliances
63. Number of kitchen appliances furnished
64. Adequacy of the laundry facilities
65. Availability and quality of government furniture
66. Adequacy of electrical service
67. Purity of the water
68. Hot water supply
69. Adequacy of the heating system (including insulation)
70. Cost of utilities
71. Cost of housing
72. Maintenance and repair services on your residence
73. Personal safety and security
74. Degree of privacy
75. External appearance of the residence
76. Appearance of the neighborhood
77. Number/availability of recreational facilities for teenage children
78. Number/availability of recreational facilities for pre-teen children
79. Convenience of residence to playyards/playgrounds
80. Convenience of residence to youth activity centers
81. Convenience of residence to post, base or duty station
82. Convenience of residence to post or base facilities (e.g., commissary and exchange)
83. Convenience of residence to medical dispensary/clinic
84. Convenience of residence to major medical facilities
85. Availability of child care services and facilities
86. Transportation time for children being bussed to school
87. Accessibility of public transportation
88. Your overall satisfaction with the adequacy and comfort of your residence
89. Your spouse's overall satisfaction with the adequacy and comfort of your residence

49. Which of the following best describes the extent to which initial costs (deposits, fixtures, etc.) were a problem for you?
0. Does not apply; e.g., have only lived in government housing
  1. Not a problem
  2. Slight problem (had enough money to cover costs)
  3. Moderate problem (had to borrow part of the money or give up some conveniences/requirements)
  4. Serious problem (had to borrow most of the money or give up many conveniences/requirements)
  5. Very serious problem (was not able to have suitable housing because I could not obtain the money)
50. If you live in the civilian economy, what is your approximate monthly out-of-pocket expense for housing (rent, utilities, and initial costs) above your housing allowance (BAQ and Rent Plus or SHA)? (Enter "000" if your allowances cover your costs or if you live in government housing.)
51. Are you sharing living expenses (rent, utilities, etc.) with other persons (excluding dependents)?
0. No
  1. Yes
52. Approximately how many miles (to the nearest mile) is your residence located from your post, base or duty station? (If residence is less than a mile, enter "01".)
53. Approximately how many minutes does it normally take you to commute from your residence to your post, base or duty station?
54. If you live in economy (civilian) housing or government-leased quarters, which statement best describes your community/neighborhood?
0. Does not apply; I live in government-owned quarters
  1. Most of the people in our community/neighborhood are Americans
  2. There is an equal mix of Americans and host nationals in our community/neighborhood
  3. There are few or no other Americans in our community/neighborhood
55. Is transportation from your residence to post or base facilities a problem for your dependents?
0. No, not a problem
  1. Yes, a minor problem
  2. Yes, a major problem
56. Which of the following best characterizes your spouse's transportation arrangements (e.g., to shop, or to get to post or base facilities)?
0. No spouse
  1. Usually provides own transportation (e.g., drives self)
  2. Usually rides with friends, neighbors or carpool
  3. Usually uses public or commercial transportation
  4. Usually rides with me

## IV. LOCATION AND COST OF PERMANENT HOUSING

## 44. Where are you currently living?

1. U.S. government-owned family housing
2. U.S. government-leased family housing
3. Dormitory or barracks
4. Economy (civilian) housing
5. Other (e.g., managed by host country)

## 45. Where would you prefer to live?

1. U.S. government-owned family housing
2. U.S. government-leased family housing
3. Dormitory or barracks
4. Economy (civilian) housing
5. Other (e.g., managed by host country)

## 46. In what style of housing are you currently living?

1. Single-family, detached
2. Duplex
3. Townhouse or row house
4. Apartment (walk up)
5. Apartment (elevator)
6. Dormitory or barracks

## 47. Who administers housing where you live?

1. Army
2. Navy
3. Marine Corps
4. Air Force
5. Civilian landlord
6. Other (e.g., host country)
7. Don't know

48. How many months have you lived in your permanent housing? *(If less than one month, enter "01".)*



**Questions 34 to 39:** Indicate how helpful the housing office was in providing the following services. *(Use answers from the box below.)*

1. Not provided by the housing office
2. Did not use the service
3. Not at all helpful
4. Somewhat helpful
5. Very helpful

34. Orientation to local housing market
35. Transportation to inspect economy housing listings
36. Language interpretation in dealing with the landlord
37. Lease review and/or rental negotiation
38. Overall assistance in finding economy housing
39. Assistance with utility companies

**Questions 40 to 42:** Indicate how satisfied you are/were with each of the following. *(Use answers from the box below.)*

0. Does not apply; don't know
1. Very dissatisfied
2. Somewhat dissatisfied
3. Neither dissatisfied nor satisfied
4. Somewhat satisfied
5. Very satisfied

40. Length of wait for government housing
41. Referral services provided by the housing office
42. Assignment services provided by the housing office
43. Is your current housing permanent or temporary?  
See definition of "permanent housing" and "temporary lodging" below.
1. Permanent *(Continue with question 44)*
  2. Temporary *(Skip to question 104 on page 13)*

**NOTE:** "Temporary lodging facilities" are:

- designated temporary government quarters
- commercial lodgings for which Temporary Living Allowance (TLA) is/was received.

"Permanent Housing" is:

- government housing to which a service member with or without dependents is assigned
- housing in the civilian economy which is owned or leased by the service member

27. Did you want your dependents to accompany you at your current post, base or duty station?

1. No, very much against
2. No, somewhat against
3. Undecided or mixed feelings
4. Yes, somewhat in favor
5. Yes, very much in favor

28. Which best describes the effect of your "unaccompanied" status on your military job performance?

1. I am much less effective
2. I am somewhat less effective
3. No impact on my performance
4. I am somewhat more effective
5. I am much more effective

### III. FINDING PERMANENT HOUSING

**NOTE:** "Permanent housing" is:

- government housing to which a service member with or without dependents is assigned
- housing in the civilian economy that is owned or leased by the service member.

Questions 29 to 33: Indicate how satisfied you were with the following aspects of listings of economy (civilian) housing provided by the housing office. (Use answers from the box below.)

0. Does not apply
1. Very dissatisfied
2. Somewhat dissatisfied
3. Neither dissatisfied nor satisfied
4. Somewhat satisfied
5. Very satisfied

29. Number of listings

30. Up-to-date information on listings

31. Size of units

32. Rental costs

33. Commuting distances from rentals to your post, base or duty station

## SUMMARY OF WRITE-IN COMMENTS

Included in the questionnaire was a section for the personnel surveyed to fill in as an open-ended comment sheet. This section was divided into three subsections dealing with foreign family housing, support facilities, and a miscellaneous section. Approximately half of all those surveyed returned this comment sheet. This section was useful in that it gave a human feeling to the issues addressed within the questionnaire. Additionally, it provided a method to capture problems/issues that were not covered in the quantitative portion of the instrument. Most of the returns addressed the issues directly, while some used the whole sheet to elaborate on one particular problem area.

The reader is reminded that most of the comments received were negative. Respondents who were satisfied with their housing and living conditions generally expressed this attitude through the response categories on the questionnaire. Those who had had bad experiences or were currently dissatisfied were much more likely to include written comments. The reader should also be aware that while certain problems surfaced only in one or two countries, this does not mean that it is not a problem elsewhere. Respondents who added their written comments to the already lengthy questionnaire were most probably responding to the issues and problems most salient to them at the time. For example, the written responses received from the Greenham Common area of England on anti-American feelings due to the MX Missile deployments reflected a highly salient issue at the time the questionnaire was distributed. Had that situation been different, those same respondents may have written on another topic. Similarly, respondents who did not comment in writing on issues that were found to be of concern in the quantitative portion of the survey may have felt that there was no need to comment further. Therefore, what may appear to be discrepancies between the written comments and the quantitative data should not be interpreted as actual.

All of the comment sheets received were scanned to determine the most prevalent problems and issues concerning each country/Service group. Some problems, such as those concerning child care or medical care, existed in many groups. Others, such as earthquakes, were unique to only one country. The typical content analysis methodology was not used in this study. Rather, a proportional sample of 3,682 positive and negative comments were selected out of the total to be content analyzed. The most prevalent categories were then determined from this sample.

The proportion of positive and negative comments received are shown for each category. The discussion under each category highlights the common themes discovered. In many cases, the concerns of the respondents varied considerably by location within the country. Where this was evident from the comment sheets, it is noted in the discussions.

### Medical/Dental Facilities

Medical/dental care was found to be a strong area of concern among respondents who returned written comments in the United Kingdom, Germany, Italy, and Korea. Approximately 94 percent of the comments received from respondents in these countries were negative and 6 percent positive. The most prevalent comments with respect to medical care addressed the following aspects of government facilities: severely limited facilities in relationship to the size of the military communities, the lack of trained personnel and variety of specialists (especially pediatricians and OB-GYNs), and deficiencies in facilities needed for trauma care and life threatening situations. Dispensaries were generally considered adequate for minor problems only. Concern focused on the lack of major medical facilities within a reasonable distance of the duty station. In Italy, cases

involving specialized medicine (urology, neurology, surgery) are sent to Germany for treatment, at considerable expense and inconvenience to the service member and family. At Bentwaters, England, no OB bed space was available, which necessitated delivery at Lakenheath, a considerable distance away. The few positive comments received on medical care expressed the feeling of greater family security associated with having good hospital facilities and staff close by. Several respondents reported alternative use of the local facilities, but only as a last resort. Differences in the standards of local facilities (e.g., cleanliness, lack of privacy) were cited as the reasons (especially in Italy).

On dental care, the comments were similar, with the concern focused on lack of government dental care opportunities for dependents and overcrowded/understaffed clinics.

### Quality of Housing

Comments on the quality of housing (both government and economy) came from respondents in all five of the countries surveyed. Approximately 5 percent of these were positive, with variations evident by location. In the United Kingdom, the most common theme was that the housing (of all types) was too small, both overall and in terms of room sizes. This was seen as creating a storage problem. In Germany, where government-owned housing is largely stairwell apartments, respondents were highly critical of the conditions where privacy is minimal, unsupervised children play in the stairwells, and repairs and improvements take years to be completed. The quality of economy housing was considered superior to that of the government-owned stairwell units. In Italy, where the majority of all military families lived in economy housing, the complaints centered around utilities. Water was reported to be nonpotable and in short supply during the summer. Heating costs were considered exorbitant due to the lack of insulation. In Japan, the write-in comments came from those living in economy housing. Their complaints focused on the small sizes of the units, the cost of housing in relation to the size, the lack of storage space, the inadequacy of kerosene heating, and the high cost of heating due to lack of insulation in a very cold climate. In Korea, the comments on quality of housing came from the unaccompanied service members. Their comments were on barracks living and included the following complaints: old, run-down barracks; having to walk to another building to a shower or latrine; two and three person rooms; and lack of privacy.

### Housing Shortages

Housing shortages were most frequently commented on by respondents living in the United Kingdom, Japan, and Korea. Less than 1 percent of the comments were positive. The primary theme underlying the negative comments on this topic was that the lack of government housing creates a flood of military families seeking economy housing in areas where economy housing is also in short supply and/or is not adequate in terms of American standards and expectations. Waiting periods for government housing were reported to be 1 to 2 years or longer. The economy housing available was reported to be deficient in modern conveniences and (especially) expensive to heat due to lack of insulation. Suggestions from the respondents included: better management of command sponsored tours to reduce the excessive waiting times, greater leniency in approving economy housing for rentals, and (most popular) an aggressive building program to accommodate more military families on the installations.

### Initial Housing Costs

Comments about initial housing costs came primarily from respondents living in the United Kingdom, Italy, and Japan. Not surprisingly, they were all negative. The common theme found in the comments received on this topic was that initial costs to set up a household in an overseas location strain the budgets of even higher graded service members, deplete the savings of others, and throw some into debt. The respondents who commented on this topic reported their initial expenses at \$1,000 to \$3,000, much of which was not recoverable. These expenses usually included: moving costs, realtors fees, initial deposits (on the rental unit and utility deposits), storage of furniture, and purchase of fixtures (including sinks and toilets in some locations), cabinets, wardrobes (shrunk), adapters, curtains, etc. In Japan/Okinawa, where there are restrictions on the shipping of privately owned vehicles, these costs may also include the purchase of a car.

Respondents commenting on this issue made several points about the situation: These costs are prohibitive for the lower grade enlisted families, many of these costs could be avoided if government family housing was available, and in some areas, the Rent Plus money does not act as reimbursement for the initial expenses because it is needed to cover the high utility costs that are incurred when living in economy housing.

### Spouse Employment

Spouse employment emerged as a serious issue in the written comments from respondents in the three European countries (United Kingdom, Germany, and Italy). All comments received on this topic were negative. The most prevalent themes included: the general lack of spouse employment opportunities on the duty station, the need for spouses to be employed to contribute to the family income and/or to provide something for them to do, resentment that the few jobs available are given to local nationals instead of military spouses, and the inability of spouses with degrees and professions to pursue their careers and remain proficient. A common criticism was against the DoD Dependent School (DoDDS) system for hiring of teachers, which was perceived to exclude qualified military spouses. "Prodependent" policies in hiring were recommended.

### Child Care

Written comments on child care were the greatest among respondents assigned in the United Kingdom, Germany, and Japan/Okinawa. Of those received, approximately 92 percent were negative; and 8 percent, positive. The most common themes found regarding government facilities were: nonexistent or understaffed centers to meet the needs of the military community (especially working spouses and single parent families); lack of a sufficiently wide range of child care to include infants through 10 to 12 year old children; insufficient hours of operation of the existing child care centers to accommodate rotating watches, recalls, exercises, grave shifts, 12 hour shifts, weekend workers or parents who need a babysitter on short notice; centers located in old, dilapidated buildings; and lack of dedication to the children by center staff. Even the government centers that were praised as well-run facilities were described as under staffed or inadequately housed. Child care on the economy in Japan/Okinawa was described as excellent and a better value for approximately the same cost as the government facilities. In the United Kingdom, qualified child care personnel in the economy was reported to be very hard to find or not affordable (especially among the lower grade respondents).

### DoD Schools

Comments about the DoD schools came principally from respondents assigned in the United Kingdom and Japan/Okinawa. All comments were negative. In both countries, the common complaints were poor handling of discipline, unprofessionalism among the teachers, and a lack of qualified teachers. Respondents in Japan/Okinawa reported taking their children out of the DoD schools and paying very high rates for them to attend private schools run by the Japanese. On Okinawa, respondents with nonsponsored dependent children felt that the DoDDS system should be staffed to handle all the children, both sponsored and nonsponsored. In the United Kingdom, additional comments were made about lack of after-school activities for teenagers and, especially, about the locations of DoD schools. Transportation time to school was reported to be one hour each way in the London area. In another location (RAF Wethersfield), the children go to high school at RAF Lakenheath, 50 miles away and live in dormitories all week. These were described as "very unpopular" situations.

### Recreational Facilities and Youth Programs

Comments on recreational facilities and youth programs came primarily from respondents living in the United Kingdom, Germany, and Japan. All of the comments received were negative. The single common and overriding theme noted was that of a need for more recreational and youth oriented activities. The concern of the respondents who sent in comments focused on the importance of preteen and teenage children having something to do, to distract them from mischievous activities or from "hanging around" with the young enlisted service members. Suggestions for improvement of the situation included: giving them priority for jobs on the installation; expanding after school extracurricular activities; hiring more personnel to direct youth activities; funding the expansion of the currently overcrowded facilities; building additional facilities; and ensuring that a wider range of activities are available to accommodate children who are not sports oriented. Many of the service members responding on this topic identified their duty stations as being located in remote and/or rural areas.

### Remote Bases

Comments about living in remote areas came primarily from respondents in the United Kingdom, Germany, and Italy. All of the comments received were negative. To a large extent, the problems of living in a remote area echoed those made in several other categories. In particular, distances from the installation to major medical facilities and DoD schools were a major source of concern, as were the lack of recreational and spouse employment opportunities at these small installations. The inconveniences and dissatisfactions mentioned in the other categories appear to be even greater among respondents living in remote areas. At one installation in Italy (not identified) children must be bused 50 miles to school (one way) every day. At another in Italy, the nearest medical/dental clinic is 50 miles, and the nearest U.S. hospital is 100 miles. At one installation in the United Kingdom, the commissary and exchange were reported to be 60 miles away. Expenses incurred as a result of these long commutes to support facilities was also a major concern of those living in remote locations. The suggestions of the respondents was that there is a need for greater AFEES servicing of small posts, bases, and duty stations.

### Working Conditions

The greatest number of written comments on working conditions came from respondents in the United Kingdom, Germany, and Korea. They were 99 percent negative. The most commonly found themes in the comments were: the poor and overcrowded condition of the work facilities and areas (especially in the United Kingdom and Germany); lack of parking facilities (especially in the United Kingdom and Germany); and the excessively long work weeks (50 to 70 hours) and continual exercises (especially in Korea near the DMZ). Many comments on working conditions were not very specific about exactly what were the sources of dissatisfaction.

### Language and Cultural Differences

Proportionally, the greatest percentage of positive comments received on any major topic concerned language and cultural differences. Comments on this topic were received from respondents in Germany and Japan.

Most of the comments from Germany on language and cultural differences were positive (70%). Those respondents who did not let the language and culture differences intimidate them found that they were able to adapt to the culture and enjoy the tour. Even those who were intimidated did not blame the local nationals. They suggested that personnel being assigned in Germany need greater assistance in the form of language and cultural indoctrination. Comments from respondents in Japan on language and cultural differences were 47 percent positive and 53 percent negative. Again, the tours were seen as exciting and worthwhile experiences for the families, but complaints were common that there was a lack of language training and orientation into the culture.

### Housing Referral Offices

Comments on this topic came from respondents in Germany, Italy, and Korea. The comments from Germany on the housing referral office were 97 percent negative and 3 percent positive. The three major themes in the negative comments were: lack of consistency in referrals for economy housing; lack of helpfulness to the service personnel; and an attitude of doing the service members a favor by providing referrals.

All of the comments from Italy and Korea were negative, even among those married to Korean nationals. Two themes were most apparent: lack of English speaking personnel in the housing offices and the perception of collusion between the local national employees and the local landlords. In Italy, the commenting respondents felt that the Italian housing office employees took advantage of the Americans, favoring the Italian landlords and utility companies in negotiations over rental costs and other deposits. In Korea, several service members explained that one must work within a threat and bribery system in the housing referral office to obtain adequate housing.

### Dissatisfaction with Local Employees

Comments on this topic came from Italy and Korea. All were negative. In Italy, in addition to the perception of collusion between Italian housing office personnel and landlords, there was dissatisfaction with the lack of English speaking employees in the housing offices, and the perception that many exchange items end up going home with the local nationals and never making it to the American community. In Korea, local national employees were described as speaking little or no English, making it difficult for Americans to find housing through the referral office and to shop in the government

facilities. In even stronger expressions than those from respondents in Italy, respondents in Korea described a severe black market problem and the ineffectiveness of the ration control program to curtail it.

### Separation and Related Problems/Nonsponsored Families

Comments on this topic came principally from respondents in Japan/Okinawa and Korea. Surprisingly, they were not all from personnel serving designated unaccompanied tours. Not surprisingly, they were all negative. From Navy respondents in Japan, complaints were relatively common from those who were out to sea so much that they hardly saw their families. From Okinawa, the unaccompanied Marines expressed strong dissatisfaction with being separated from their families due to: lack of housing; lack of privileges (other than housing) for nonsponsored dependents; and limitations on MAC flights and/or "mid-tours" for spouses. In Korea, Army and Air Force personnel echoed these concerns. Respondents in both countries commonly described the following situations: decisions not to re-enlist for fear of having another unaccompanied tour, divorces caused by separation, and hardships and financial problems trying to maintain two households. Unaccompanied personnel felt the worst part of their tour was the separation from their families. Those who had paid their family's way to be there with them resented their spouses not being able to share in the available government facilities.

### Country-specific Comments

#### United Kingdom

Anti-American Feelings in the Community. In the United Kingdom, many comments (all negative) were received concerning what the American military perceived as anti-American feelings. From Greenham Common where the British were protesting location of the MX missiles, the comments were about the "concentration camp" atmosphere, verbal abuse from the protesters, and inconvenience associated with the situation. From other parts of the country, the commenting respondents felt that the British resented what they considered to be the "rich" Americans. This attitude was seen to contribute to purposeful harassment and local nationals' attempts to take advantage of the American personnel.

#### Germany

Housing for Lower Enlisted Personnel. Comments on this topic came from enlisted respondents and officers alike. They uniformly favor providing more government housing for those families currently ineligible due to the costs and difficulties involved for young families trying to make it in the economy. The respondents also felt that the hardships imposed on first termers contributed to their decisions to leave the Service.

Parking. All comments received on this topic were negative and came from Air Force personnel. The overriding theme of these comments was that there is simply not enough parking available, both on the duty station and within the housing areas.

Berlin. All comments received from respondents living in Berlin were positive. One respondent said "It offers the best of all possible living conditions."



## Italy

Earthquakes. Constant tremors, the fear of major earthquakes, and the need for the base to be located closer to housing were the themes of comments received on this topic. All comments were negative and came principally from the Navy in southern Italy (Naples).

Crime. Unique to Italy also were the comments on crime and vandalism. Negative comments on the situation (rampant car napping, break-ins, vandalism) came from Army, Navy, and Air Force personnel (i.e., from all areas of Italy).

Local Telephone Service. Comments on the lack of local telephone service came from both Army and Navy personnel. All were negative, with the overriding theme being the need for telephone service for family communication and security.

Living in Naples. Other than in Korea, more negative comments were received from the respondents living in Naples than in any other location. The common themes were the following: family housing located too far from the base and too close to the water to heat the units; lack of playground space for children and rules prohibiting American children from playing where the Italian children play; frequent earth tremors; lack of telephone service; traffic jams; and crime and vandalism. Overall, the stress level for families living in Naples was described as very high.

## Japan/Okinawa

Temporary Living Conditions. Comments on this topic were 77 percent negative and 23 percent positive. Positive comments praised the comfort of the facilities. However, even the positive comments about the temporary facilities included dissatisfaction with its management (necessitating several moves during the length of stay) and with the number of units available for the population. Among the negative comments, the most prevalent themes were: lack of temporary facilities on the installation, which results in long commutes to locate permanent housing; small quarters; difficulty finding economy temporary facilities; and not being allowed to stay in temporary facilities long enough to locate housing, process in, shop for cars, and move into housing.

Shipping and Storage. All comments on this topic were negative. Three themes were most prevalent: the prohibition on shipping of privately-owned automobiles; weight restrictions on shipping of household goods; and lack of storage space in the housing units.

**APPENDIX C**  
**COMPARISON OF SELECTED ITEMS: CONUS VERSUS OVERSEAS**

## COMPARISON OF SELECTED ITEMS: CONUS VERSUS OVERSEAS

In a 1982 Department of Defense (DoD) survey (Lawson, Somer, Feher, Mitchell, & Coultas, 1983), housing preference and satisfaction were measured among 11,795 service members currently living in continental United States (CONUS) in the Army, Navy, Air Force, and Marine Corps. This study also asked the respondents to indicate their opinion of a number of policy proposals affecting assignment to government housing. In most cases, the issues addressed in the overseas study were considerably different from those addressed in the CONUS study. Only selected items were similar enough to permit comparisons. In the discussion that follows, those items that were very close in wording on both questionnaires are compared. Also, since regional differences were not examined in the CONUS study, the overseas data are collapsed across countries.

### Obtained Samples

The obtained samples in the two studies were somewhat different. Table C-1 shows the percentage breakdown by pay grade groups.

Table C-1

Obtained Samples by Pay Grade Group:  
CONUS Versus Overseas

Pay Grade Group	Sample (%)	
	CONUS	Overseas
E-1 to E-3	7.2	8.6
E-4 to E-6	16.0	27.8
E-7 to E-9	18.6	25.0
W-1 to W-4	2.5	6.1
O-1 to O-3	15.5	14.9
O-4 to O-6	40.3	17.6

The CONUS sample was particularly disproportionate with respect to commissioned officer respondents (55.8%), while the overseas sample had a majority (52.8%) of E-4 to E-9 respondents. In both samples, the E-1 to E-3 respondents were not well represented as a result of low return rates in that pay grade group. When comparisons are made of enlisted/officer responses, the reader is cautioned to be aware of the disproportions in the samples. The CONUS officer responses reflect the opinions of the O-4 to O-6 group more heavily than warrant and O-1 to O-3 officers, and the overseas enlisted responses are weighted in favor of the E-4 to E-7 respondents.

### Current Housing Type

Housing types in the CONUS study were primarily differentiated only by government versus civilian. Within the government category, less than 6 percent of the respondents were in government-leased or off-base military housing. In contrast, housing in the overseas study was broken down by government-owned, government-leased, economy (civilian), and "other" housing. In the overseas study, government-owned housing was

primarily located on base and built to U.S. specifications in terms of size, etc. Government-leased housing was primarily foreign-built, located off the installation, and managed by the U.S. government. Economy housing was foreign-built, located off the installation, and managed by local national landlords. In a few instances, service members had also purchased local houses. Other housing generally was owned by the local country (e.g., Royal Air Force (R.A.F.) housing in the United Kingdom).

The data on housing types show that respondents assigned overseas in 1984 were much more likely to be living in government housing (45.5% in government-owned housing and 12.3% in government-leased housing) compared to those assigned in CONUS in 1982 (24.9% in government-owned/controlled housing). The remainder of the overseas respondents lived in economy (38.8%) or other types of housing (3.2%). Over three-quarters of the CONUS respondents (75.1%) lived in civilian housing, with over half (52.5%) in their personally owned homes.

### Housing Preference

In the CONUS sample, where the service member was living generally was a good predictor of where he/she preferred to live. Approximately 91 percent of the residents of military housing expressed a preference for military housing, and 98 percent of the residents of civilian housing expressed a preference for civilian housing. Overseas, the same relationship held true, but to a much lesser degree and primarily only for those respondents living in government-owned or economy (civilian) housing. Approximately 82 percent of the residents of government-owned housing preferred their current housing type and 61 percent of the residents of economy (civilian) housing preferred economy housing, while only 34 percent of the residents of government-leased housing preferred government-leased housing. In general, this is an indication of greater preference for government-owned housing overseas than in CONUS.

The lack of preference for government-leased housing in foreign areas may be partially a function of the location of these units in relationship to the installations and government facilities. In Italy, Japan, and Korea, government-leased housing was reported to be located farther from installations and support facilities than most economy housing. While this situation may also occur in CONUS, difficulties with transportation, costs of local goods and language differences in foreign countries are exacerbated by living farther away from support facilities.

In the CONUS study, the preference for military family housing was greatest among the lower grade enlisted respondents and declined as pay grade level increased. This trend was not found in the overseas study. Preference for government-owned housing was generally high, regardless of pay grade level. This was especially true in the United Kingdom and in the Asian countries where economy (civilian) housing was in short supply, very expensive, and/or inadequate by American standards (e.g., size, condition).

### Housing Style

Considerable differences were found between the CONUS and overseas housing styles. Keeping in mind that just over half of the CONUS respondents were home owners, 67.8 percent lived in single family detached residences, 17.5 percent in duplex units, 8.7 percent in apartments, and 6.0 percent in other styles of housing (e.g., condominiums, mobile homes). In contrast, the overseas data showed only 23.5 percent living in single family, detached homes; 20 percent in duplexes; 37.2 percent in apartments, and 19.3 percent in other styles of housing (primarily town or rowhouses). Since the CONUS study

showed that apartments are the least favored of all housing styles, greater dissatisfaction with housing overseas may also be partially a function of the greater percentages living in apartments.

### Satisfaction with Housing

Only 11 items on the housing satisfaction lists in both questionnaires were appropriate for making direct comparisons. These items were measured in both studies using similar 5-point response scales (very dissatisfied, somewhat dissatisfied, neither dissatisfied nor satisfied, somewhat satisfied, very satisfied). Comparisons are shown in Table C-2. The first eight items listed were rated among the most important aspects of housing by the CONUS respondents. Convenience to the place of work was only moderately important; child care and availability of public transit were among the least important aspects of housing in the CONUS study. In the overseas study, overall satisfaction with the comfort and adequacy of the permanent residence was found to be most closely associated with satisfaction with structural aspects of the housing (e.g., overall size, room sizes) and with the immediate physical-psychological surroundings of the residence (e.g., residence and neighborhood appearance, privacy, and security).

Table C-2  
Housing Type Groups Reporting Greatest Satisfaction  
with Aspects of Permanent Housing by Housing Type

Aspect	Housing Type			
	CONUS		Overseas	
	Enlisted	Officers	Enlisted	Officers
Security/safety	Economy	Gov-owned	Gov-owned	Gov-owned
Privacy	Economy	Economy	-- <sup>a</sup>	Economy
Appearance of the residence	Economy	Economy	Economy	Economy
Adequacy of the heating system	Gov-owned	-- <sup>a</sup>	Gov-owned	Gov-owned
Overall size of the residence	Economy	Economy	Gov-owned	Economy
Housing costs	-- <sup>a</sup>	Gov-owned	Gov-owned	Gov-owned
Neighborhood appearance	Economy	Economy	Economy	Economy
Utility costs	Gov-owned	Gov-owned	Gov-owned	Gov-owned
Convenience to the place of work	Gov-owned	Gov-owned	Gov-owned	Gov-owned
Child care	Economy	-- <sup>a</sup>	Gov-owned	Gov-owned
Availability (access) of public transit	Economy	Economy	Gov-owned	Gov-owned

<sup>a</sup>No differences were found in satisfaction levels as a function of housing type for these groups.

Table C-2 shows the groups that were most satisfied with each of these 11 aspects of their current permanent housing, by officer-enlisted and CONUS-overseas. For example, on the first item (security/safety), the CONUS enlisted respondent group living in economy (civilian) housing was more satisfied than the CONUS enlisted group living in government-owned/controlled (military) housing. In contrast, officers in CONUS and both enlisted and officer respondents overseas were more satisfied with security if they were living in government-owned housing than their counterparts in economy housing.

The comparisons in Table C-2 show that there were more similarities than differences between CONUS and overseas respondents with respect to satisfaction with aspects of housing. Residents of economy housing, both in CONUS and overseas, were more satisfied than those in government housing with privacy, residence appearance, and neighborhood appearance. All groups, except the overseas enlisted respondents, also were more satisfied with the size of their residences if they lived in economy housing. As already mentioned, these aspects of housing were considered very important by CONUS respondents, and overall satisfaction with the residence was closely related to these aspects of housing in the overseas sample. The implication is that more attention may need to be paid to privacy and size of government housing during design and construction and to appearance (maintenance) after construction, if the goal is to have satisfied military housing residents.

In both studies, residents of government housing were more satisfied than those in economy housing with heating system adequacy, housing, and utility costs. These similarities are not surprising in light of the soaring housing and utility costs of recent years, costs that residents of government housing do not have to deal with directly.

Differences between the CONUS sample and the overseas sample were found on only four items. As mentioned, enlisted respondents in CONUS were more satisfied with security in economy housing compared to the other groups who were more satisfied with security in government housing. Enlisted respondents overseas were more satisfied with size of economy housing compared to the greater satisfaction of the other groups in civilian housing. This may be partially a function of their inability to afford larger housing units in overseas locations, especially when they are competing with higher income officers in markets where housing is in short supply. On child care and public transportation, CONUS residents of economy housing were more satisfied than their government housing counterparts, while the reverse was true overseas.

Comparing the overall trends found in both sets of data, two findings of the CONUS study with respect to satisfaction ratings also held true overseas: (1) officers were generally more satisfied than were enlisted, and (2) satisfaction ratings on aspects of the permanent housing were relatively high for all respondent groups. Officers and senior enlisted personnel were both more likely to live in government-owned housing and better able to afford economy housing if they chose that type.

#### Policy Proposals Affecting Government Housing Assignment

In the CONUS study, respondents were asked if they favored or opposed nine proposals that would affect government housing assignment in the CONUS. In the overseas study, respondents were asked about six of these same proposals in relationship to government family housing in foreign areas.

The wording of the policy proposals was somewhat different on the two questionnaires. Wording of each is shown below, followed by a comparison of the percentages in favor, by enlisted/officer and the rank order of their popularity in terms of the percentage in favor. The proposals are presented in the order that they appeared on the CONUS questionnaire. Rank orders are based only on the six proposals that are compared, omitting the remaining three that were in the CONUS study. Comparisons of proposals with very different wording should be done with caution. Additionally, the reader is reminded that the surveys were conducted 2 years apart.

### Proposal 1

CONUS: Extend eligibility for military family housing to all service members with dependents, regardless of pay grade.

Overseas: Extend eligibility for assignment to government family housing to all service members with dependents, regardless of pay grade.

Service	CONUS				Overseas			
	Enl.	Rank	Off.	Rank	Enl.	Rank	Off.	Rank
Army	69.8%	2	57.5%	2	58.4%	2	48.1%	2
Navy	77.4%	1	60.7%	2	70.6%	1	61.7%	2
Air Force	76.6%	1	68.2%	1.5	73.2%	1	65.0%	3
Marine Corps	75.6%	1	61.6%	2	68.0%	1	51.2%	3

This proposal of unconditional extension of eligibility for family housing was slightly more popular in the CONUS study than in the overseas study, based both on the percentages in favor and the rank ordering. The Army respondents in both studies and Marine Corps respondents overseas were the least likely to favor the proposal.

### Proposal 2

CONUS: Assign military housing solely on the basis of bedroom requirements, regardless of rank.

Overseas: Assign government family housing solely on the basis of bedroom requirements, but retain designated officer and enlisted housing.

Service	CONUS				Overseas			
	Enl.	Rank	Off.	Rank	Enl.	Rank	Off.	Rank
Army	69.9%	1	21.4%	6	58.5%	1	72.3%	1
Navy	63.4%	2	21.1%	6	53.4%	3	69.4%	1
Air Force	59.2%	2	25.5%	6	51.8%	3	63.6%	3
Marine Corps	55.2%	3	19.0%	6	62.5%	2	71.5%	2

The obvious discrepancy between the CONUS and overseas officer responses to this proposal reflects the difference in wording of the two questionnaire items. In general, this was a popular proposal in both studies. However, without the condition of retention

of designated enlisted and officer housing in the CONUS study, this became the least popular of the six proposals among officers in all four Services. Another proposal that was on the CONUS questionnaire, but not on the overseas one, asked the service members their opinion of retaining designated officer and enlisted housing. It was the most popular of the nine proposals among officers in all Services. With this condition attached to the proposal in the overseas study, officers were even more in favor than enlisted respondents.

### Proposal 3

CONUS: Maintain existing housing assignment procedures for military family housing.

Overseas: Make no change to the existing assignment procedures for government family housing.

Service	CONUS				Overseas			
	Enl.	Rank	Off.	Rank	Enl.	Rank	Off.	Rank
Army	29.2%	6	39.3%	3	26.5%	6	30.0%	4
Navy	18.1%	6	37.9%	4	23.8%	6	28.3%	5
Air Force	23.5%	6	36.2%	5	17.8%	6	21.7%	6
Marine Corps	27.1%	6	46.6%	3	23.0%	6	31.9%	4

This proposal was consistently unpopular among the enlisted respondents in both studies. It should be remembered that all of the six proposals compared here focused on policy proposal changes that would bring service members who were currently ineligible into government family housing. The consistency of the enlisted responses may, in part, reflect this focus in the questionnaire items. In contrast, officer responses revealed their self-interest in retaining priority for government family housing. It is interesting to note that this self-interest among officers was higher among CONUS respondents than those overseas, even though as a whole they were less likely to prefer government housing over economy housing in CONUS. As with the first proposal, Army and Marine Corps respondents were most traditional in their views, especially in the CONUS study.

### Proposal 4

CONUS: Construct new, possibly smaller, military family housing units specifically for pay grades E-1 to E-3.

Overseas: Construct family housing for personnel (with dependents) in pay grades E-1 to E-3 and E-4 (2 years or less service).

Service	CONUS				Overseas			
	Enl.	Rank	Off.	Rank	Enl.	Rank	Off.	Rank
Army	57.3%	3	68.2%	1	55.2%	3	48.0%	3
Navy	52.2%	4	62.4%	1	60.8%	2	54.8%	3
Air Force	57.3%	3	68.2%	1.5	69.0%	2	66.9%	1
Marine Corps	57.7%	2	70.9%	1	61.7%	3	51.3%	2



Comparing these two proposals across studies presents a problem for interpretation. In the CONUS study, where the proposal included the phrase, "possibly smaller," it was especially popular among the officers, while receiving less support from the enlisted respondents. In the overseas study, where the phrase was omitted, the enlisted respondents were generally more in favor than the officers. The reader is reminded that in the overseas study, the size of the housing unit was found to be an important predictor of overall satisfaction with the residence, regardless of housing type. However, inclusion of the "possibly smaller" phrase in the CONUS study appears to have impacted officer responses more than enlisted responses. It may be that objection to bringing the lower grade enlisted families into military housing is not the issue as much as having them receive a comparable benefit so early in their careers. Overall, however, the proposal received majority approval by respondents in both studies, with the exception of the Army officers living overseas.

#### Proposal 5

CONUS: Extend housing eligibility to pay grades E-1 to E-3, even if time on waiting lists is increased for everyone.

Overseas: Extend eligibility for government family housing to personnel (with dependents) in pay grades E-1 to E-3 and E-4 (2 years or less service), even if time on the waiting list increases for everyone else.

Service	CONUS				Overseas			
	Enl.	Rank	Off.	Rank	Enl.	Rank	Off.	Rank
Army	49.4%	4	37.8%	4	33.3%	4	24.1%	6
Navy	55.2%	3	38.9%	3	43.3%	4	33.5%	4
Air Force	56.1%	4	48.8%	3	48.9%	4	44.8%	4
Marine Corps	50.9%	4	41.2%	4	39.8%	4	27.5%	5

The wording differences of this proposal between the two studies probably did not alter the meaning conveyed to the respondents. Two trends are evident in both sets of data. Despite the moderate level of support, enlisted respondents in both studies favored the proposal more than officers. With respect to the first trend, the enlisted respondents most likely were expressing their strong desire to be allowed in government housing. Additionally, the proposal was favored more by respondents in CONUS than overseas. This second trend may imply the greater threat of displacement among government housing residents overseas, where economy housing is more likely to be in short supply. This was especially evident among Army and Marine Corps officers assigned overseas.

## Proposal 6

CONUS: Construct additional housing for pay grades E-1 to E-3 on a priority basis.

Overseas: Construct family housing for personnel (with dependents in pay grades E-1 to E-3 and E-4 (2 years or less service) even if it delays construction of all other government family housing.

Service	CONUS				Overseas			
	Enl.	Rank	Off.	Rank	Enl.	Rank	Off.	Rank
Army	32.5%	5	32.9%	5	29.4%	5	24.2%	5
Navy	28.3%	5	29.0%	5	30.9%	5	23.9%	6
Air Force	35.5%	5	40.6%	4	39.8%	5	37.2%	5
Marine Corps	40.0%	5	39.6%	5	33.9%	5	25.6%	6

The low percentage of respondents in favor of this proposal was highly stable across studies, Services, and pay grade groups. Of interest is the lower percentage in favor of this proposal, which includes the potential for construction delays, compared to the previous proposal in which the impact might be increased waiting list times. The previous proposal has the potential to impact everyone equally (including the lower grade enlisted), while this final proposal implies an exemption of the lower grade enlisted group from the negative impact. Although neither of these proposals was especially popular, sharing of a negative impact appears to be more acceptable than singling out the lower grade enlisted group for special treatment at the expense of others.

## Summary

Overall, where the policy proposals could be compared directly, respondents in both surveys showed many similarities in their opinions. In both groups, there seemed to be little objection to incorporating lower grade enlisted families into the government housing system as long as there is no displacement of those families currently eligible and enjoying the benefit. The self-interest of both the lower grade enlisted respondents and those who are eligible and prefer to live in government housing was evident when the proposals included the potential for negative impacts. In general, respondents in the overseas survey seemed to be more threatened than those assigned in CONUS by displacement resulting from incorporation of the lower grade enlisted families. This attitude is not surprising in light of the results of the overseas study, which showed permanent housing as a major serious problem.

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